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Introduction

The following introduces you to *Power Tools for Technical Communication*, providing some ideas as to how to use the book and schedule projects and activities.

**Concerning the Strange Organization of Power Tools**

First things first. Why is *Power Tools for Technical Communication* organized the way it is? And how do you use the thing? The rest of this introduction answers the last question, but here is the rationale for the book’s organization:

- **Typical textbook usage.** Most instructors select and sequence chapters of technical-writing textbooks to suit their preferences. Few use a textbook in chapter order. Why shouldn’t the organization of a textbook facilitate that typical usage? You can mix and match the chapters of *Power Tools* just about any way you want. In fact, the five parts of the book are rather like a Chinese menu: select one from column A, one from column B, and so on.

- **Back to technical writing!** Interesting issues such as ethics, workplace culture, teams (collaboration), international communication styles, the Internet, and gender are rather in the background here. In their place, writing issues retake center stage: organization, content, format, design, graphics, tables, and other such directly writing issues.

- **Put the technical back in technical writing!** You’ll notice too that each chapter and appendix begins with a blurb and some links relating to a “hot” scientific or technical topic. That’s to energize our students and remind them a technical writing course can be a terrific venue for exploring latest developments in science and technology.

- **Software techniques.** Many chapters show students how to do things with software: create bulleted lists, create tables and charts; design templates; use presentation software (such as Powerpoint); and much more. It’s time to make our technical communication courses home turf for these software techniques. Notice too the absence of the obligatory centerfold pages of gaudy illustrations here: our students can’t produce things like that; let’s show them graphics that are within their capabilities and how to create those graphics!

- **Basic web page design.** Instead of showing just a bare-bones web page, *Power Tools* goes further: student learn how to create headings, lists, notices, tables, charts, graphs, illustrations, highlighting, frames, and much more using direct HTML. (It will be a long time before products like Macromedia Dreamweaver and Microsoft FrontPage supplant direct HTML tagging as the best method of building web pages.)
More tools—less theory. Theory takes a backseat in Power Tools. Instead, theory expresses itself quietly (and more effectively) through the tools and procedures that dominate just about every topic covered in the book.

Power Tools and Course Schedules

No doubt the sequence of chapters in Power Tools and perhaps the content of some of the chapters themselves may look odd. Standard textbooks take that long lumbering journey through audience, ethics, writing style, workplace communication, international communication, document design, and many other such topics. You’re almost two-thirds of the way through these massive tomes before there is even a hint of a writing project.

True, these long-march textbooks carefully build a conceptual structure that students need in order to write technical documents. But students are likely to discard this conceptual baggage along the way if there are no writing projects in which it is needed.

Power Tools for Technical Communication takes a different approach:

• Part 1 covers writing projects—right up front. Each of these chapters acts like a switchboard linking to all the relevant chapters and appendixes in the rest of the book.
• Part 2 covers page-design topics such as headings, numbered and bulleted lists, notices, tables, graphs, charts, illustrations, and highlighting.
• Part 3 covers document “containers” such as business letters, memos, e-mail, formal reports, oral reports, and online documents.
• Part 4 covers project-development tools such as audience and task analysis, reviewing and revising, finding and documenting information, and team-writing strategies.
• Part 5 provides appendixes on knotty technical-writing problems involving numbers, symbols, abbreviations; review of comma, semicolon, colon, dash, hyphen, and apostrophe rules; and review of annoying grammar-usage issues.

As an instructor, you’re not forced to take a certain pathway through Power Tools. In fact, going straight through from Chapter 1 through Chapter 22 would be a disaster. Instead, the book is designed to facilitate the way most instructors use textbooks: selecting and rearranging chapters and parts of chapters to accommodate the way they want to teach technical writing.

This next section shows you some good combinations of chapters and provides a sampling of course schedules.
Chapter Combinations

As teachers, we all have our own ideas about what works best in technical-writing courses—which sequence of assignments, which combinations units. *Power Tools* is designed so that you are not forced into any combination or sequence. Its design is meant to make your process of mixing and matching units, projects, chapters, and assignments easier.

Of course, some combinations are already established in Part 1 of *Power Tools*. Infrastructures are associated with some of the common applications of technical writing.

<table>
<thead>
<tr>
<th>Infrastructure</th>
<th>Applications</th>
<th>Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>Accident, site, and investigation reports; specifications</td>
<td>No absolute connection between these infrastructures and the applications exists. For example, an investigation report can be mostly narrative (process).</td>
</tr>
<tr>
<td>Process</td>
<td>Instructions; policies &amp; procedures</td>
<td></td>
</tr>
<tr>
<td>Cause-effect</td>
<td>Primary research reports (lab and field studies)</td>
<td></td>
</tr>
<tr>
<td>Comparison</td>
<td>Recommendation, feasibility, and evaluation reports</td>
<td>Advanced students can just read the infrastructure parts of the chapters and go straight to the applications. Basic students can study the infrastructure parts carefully and write the related projects, selecting just one application to do as a final project.</td>
</tr>
<tr>
<td>Definition</td>
<td>Background reports; literature surveys</td>
<td></td>
</tr>
<tr>
<td>Classification</td>
<td>Background reports; literature surveys</td>
<td></td>
</tr>
<tr>
<td>Persuasion</td>
<td>Proposals; progress reports, resumes and application letters; inquiry, complaint, and adjustment letters</td>
<td></td>
</tr>
</tbody>
</table>

The next page shows a number of recommended chapter combinations:
<table>
<thead>
<tr>
<th>Topics &amp; projects</th>
<th>Sections</th>
<th>Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description (or its applications), illustrations, and technical style</td>
<td>Chapters 1 and 11; Appendix A</td>
<td>Graphics are needed in descriptions more than perhaps any other kind of text. Descriptions also make heavy use of numbers, abbreviations, and symbols. Thus, Chapter 11 and Appendix A are good complements to descriptions and the applications of descriptions.</td>
</tr>
<tr>
<td>Extended definition, audience analysis, headings</td>
<td>Chapters 5, 7, and 19</td>
<td>Audience is closely related to definition in that definitions are an essential way we adapt technical discussions to nonspecialist readers. Therefore, audience (Chapter 19) is a good fit for definitions. Headings (Chapter 7) are also useful in extended definitions.</td>
</tr>
<tr>
<td>Instructions, task analysis, headings, lists, notices, highlighting</td>
<td>Chapters 2, 8, 9, and 12</td>
<td>Instructions are the ideal place for students to study lists (Chapter 8), notices (Chapter 9), and highlighting (Chapter 12). Obviously, headings and graphics are vital to instructions, but too many other important topics are already bundled with instructions. Try covering headings (Chapter 7) and graphics (Chapter 11) in earlier units.</td>
</tr>
<tr>
<td>Recommendation reports, tables, information search, and documentation</td>
<td>Chapters 4, 10, 13, 20, and 21</td>
<td>A brief two-page recommendation report is an ideal place to introduce students to the information search (Chapter 20), documentation of borrowed information (Chapter 21), the design of tables, graphs, and charts (Chapter 10). Also, it’s a good time to show students how brief reports can be formatted as business letters or memos (Chapter 13).</td>
</tr>
<tr>
<td>Short reports, headings, tables, charts, graphs, report format</td>
<td>Chapters 1, 7, 10, and 15</td>
<td>Short reports provide an opportunity to cover report format (Chapter 15); show students how reports can be formatted as letters, memos, or as formal reports. Tables (Chapter 10) and headings (Chapter 7) are good for a unit on short report also.</td>
</tr>
<tr>
<td>Background report, team writing</td>
<td>Chapters 5, 22</td>
<td>The background report can become a massive project; it’s a good one for team writing.</td>
</tr>
<tr>
<td>Business letters and memos, headings, proposals</td>
<td>Chapters 6, 13</td>
<td>A common format for short proposals is the business letter, making the proposal unit a good one for coverage of business-correspondence topics.</td>
</tr>
<tr>
<td>Primary research reports, tables, graphs, charts, report format</td>
<td>Chapters 3, 7, 10</td>
<td>Considering the data that it typically presents, the primary research report is a good context for tables, graphs, and charts (Chapter 10) as well as for headings (Chapter 7).</td>
</tr>
<tr>
<td>Progress reports, business letters and memos, headings</td>
<td>Chapters 6, 7, 13</td>
<td>Progress reports are also a good unit to include business-correspondence format and headings.</td>
</tr>
<tr>
<td>Reviewing and revising, team writing, grammar, punctuation</td>
<td>Chapters 18, 22, Appendixes B, C</td>
<td>Team-writing units are a good time to cover reviewing and revising (Chapter 18) and of course the punctuation and grammar topics covered in Appendixes B and C.</td>
</tr>
</tbody>
</table>
Technical-Writing Courses without Writing Projects

It may sound like heresy, but situations do arise in which we must conduct technical-writing courses with few writing assignments—or none. *Power Tools* offers a wealth of projects in which students format existing text and projects in which students build documents from “source” materials.

<table>
<thead>
<tr>
<th>Chapter &amp; topic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter 1: Description</td>
<td>Format a description of several paragraphs complete with graphics, headings, and technical style.</td>
</tr>
<tr>
<td>Chapter 2: Process</td>
<td>Format a process explanation of several paragraphs complete with headings, lists, and graphics.</td>
</tr>
<tr>
<td>Chapter 2: Instructions</td>
<td>Format a set of instructions complete with headings, lists, notices, graphics, and highlighting.</td>
</tr>
<tr>
<td>Chapter 3: Cause–effect</td>
<td>Format a cause–effect explanation of several paragraphs complete with headings, lists, and graphics.</td>
</tr>
<tr>
<td>Chapter 3: Primary research report</td>
<td>Format a primary research report of several pages complete with headings, lists, tables, graphics, and report format.</td>
</tr>
<tr>
<td>Chapter 4: Comparison</td>
<td>Format a comparison of several paragraphs complete with headings, lists, tables, and graphics.</td>
</tr>
<tr>
<td>Chapter 4: Recommendation report</td>
<td>Format a recommendation report of several pages complete with headings, lists, tables, documentation, and short-report format.</td>
</tr>
<tr>
<td>Chapter 5: Extended definition</td>
<td>Format an extended definition of several paragraphs complete with headings, lists, tables, and graphics.</td>
</tr>
<tr>
<td>Chapter 5: Background report</td>
<td>Format a background report of several pages complete with headings, lists, tables, documentation, graphics, and formal-report format.</td>
</tr>
<tr>
<td>Chapter 6: Proposal</td>
<td>Format a proposal of several pages complete with headings, lists, tables, and business-letter or memo format.</td>
</tr>
<tr>
<td>Chapter 6: Progress report</td>
<td>Format a progress report of several pages complete with headings, lists, tables, and business-letter or memo format.</td>
</tr>
<tr>
<td>Chapter 13: Memorandum</td>
<td>Format the text of a memorandum.</td>
</tr>
</tbody>
</table>
Course Plans

The following pages show you a variety of schedules for technical communication courses using *Power Tools for Technical Communication*. The course designs represent various ways to combine the chapters, activities, and projects. Of course, you can select and combine them just about any way you want:

- **Standard course**: the classic “sampler” course.
- **Basics with formal report**: students write brief practice documents leading up to the final report, but format a variety of applications.
- **Basics-only course**: students write practice documents only, but format a variety of applications.
- **Formal report-only course**: students write a chapter of their final report every two weeks, but in class or lab they format a variety of applications.
- **Short-reports course**: students write brief versions of important applications such as proposals, instructions, recommendation reports, and progress reports.
- **Team-based reports course**: teams of 3–5 students work all semester to produce a report, but format a variety of applications along the way.
- **Online-documents course**: students learn about hypertext and HTML and produce all their work as web pages.
- **Multimedia course**: students write a brief but formal report using advanced software techniques; then produce online instructions; then produce a recommendation report for presentation software (for example, in Microsoft Powerpoint).
# Standard Course

The standard technical-communication course moves lumberously through practically every concept related to technical writing before any writing projects related to the business, professional, and technical world occur.

<table>
<thead>
<tr>
<th>Week</th>
<th>Reading &amp; activities</th>
<th>Projects (due dates)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>About this course; about technical communication (Intro); audience (19); business comm (13)</td>
<td>Get acquainted memo (week 2)</td>
</tr>
<tr>
<td>2</td>
<td>Teams in the modern workplace (22)</td>
<td>Memo on workplace writing (week 3)</td>
</tr>
<tr>
<td>3</td>
<td>Sentence style (sentence_style.html); technical style (A)</td>
<td>In-class or lab only</td>
</tr>
<tr>
<td>4</td>
<td>Report format (15); definition (5); organization.html</td>
<td>In-class or lab only</td>
</tr>
<tr>
<td>5</td>
<td>Persuasion (6); resumes &amp; application letters (14); business comms (13)</td>
<td>Resume &amp; application letter (week 7)</td>
</tr>
<tr>
<td>6</td>
<td>Description (1); cause-effect (3)</td>
<td>In-class or lab only</td>
</tr>
<tr>
<td>7</td>
<td>Persuasion, proposals (6); headings (7)</td>
<td>Proposal (week9); final report (week 14)</td>
</tr>
<tr>
<td>8</td>
<td>Process &amp; instructions (2); tasks (19 second part); lists (8), notices (9)</td>
<td>Instruction with headings, lists, notices (week 11)</td>
</tr>
<tr>
<td>9</td>
<td>Business correspondence, inquiry, complaint, and adjustment letters (13); persuasion (6, first part)</td>
<td>Business letter (week 12)</td>
</tr>
<tr>
<td>10</td>
<td>Comparison &amp; recommendation reports (4); tables (10); information search (20); documentation (21)</td>
<td>In-class or lab only</td>
</tr>
<tr>
<td>11</td>
<td>Progress report (6)</td>
<td>Progress report (week 11 or 12)</td>
</tr>
<tr>
<td>12</td>
<td>Reviewing &amp; revising (18)</td>
<td>In-class or lab only</td>
</tr>
<tr>
<td>13</td>
<td>Oral reports (16)</td>
<td>Oral report (week 13)</td>
</tr>
</tbody>
</table>
### Basics with Formal Report

A good course design for basic and intermediate students is to schedule short writing projects that lead up to a challenging final project involving a formal technical report due toward the end of the semester. This enables basic students to practice and get ready for that final big project:

<table>
<thead>
<tr>
<th>Week</th>
<th>Reading &amp; activities</th>
<th>Projects (due dates)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>About this course; about technical communication (Intro); audience (19); business comm (13)</td>
<td>Get acquainted memo (week 2)</td>
</tr>
<tr>
<td>2</td>
<td>Persuasion (6); resumes, application letters (14)</td>
<td>Resume &amp; application letter (week 3)</td>
</tr>
<tr>
<td>3</td>
<td>Description (1); headings (7); graphics (11)</td>
<td>Description with graphics and headings (week 5)</td>
</tr>
<tr>
<td>4</td>
<td>Technical style (A)</td>
<td>In-class or lab only</td>
</tr>
<tr>
<td>5</td>
<td>Process &amp; instructions (2); tasks (19 second part); lists (8), notices (9)</td>
<td>Instruction with headings, lists, notices (week 7)</td>
</tr>
<tr>
<td>6</td>
<td>Cause–effect (3); transitions (transitions.html)</td>
<td>Choose one for project due week 9; Use the others for in-class or lab work.</td>
</tr>
<tr>
<td></td>
<td>Definition (5); grammar (C); organization.html</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Comparisons (4); tables, graphs, charts (10)</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Information search (20); documentation (21)</td>
<td>In-class or lab only</td>
</tr>
<tr>
<td>8</td>
<td>Report format (15)</td>
<td>Final report (week 13 or 14)</td>
</tr>
<tr>
<td>9</td>
<td>Sentence style (sentence_style.html)</td>
<td>In-class or lab only</td>
</tr>
<tr>
<td>10</td>
<td>Punctuation (B)</td>
<td>In-class or lab only</td>
</tr>
<tr>
<td>11</td>
<td>Oral reports (16)</td>
<td>Oral report (week 12 or 13)</td>
</tr>
<tr>
<td>12</td>
<td>Reviewing &amp; revising (18)</td>
<td>In-class or lab only</td>
</tr>
<tr>
<td>13</td>
<td>Reviewing &amp; revising (18)</td>
<td>In-class or lab only</td>
</tr>
</tbody>
</table>
### Basics-Only Course

Your students may not be at a level at which they can handle lots of applications such as proposals, product specifications, policies-and-procedures, recommendation reports, and progress reports. If so, you can have them concentrate on the infrastructure projects and still get to learn the page-design techniques.

<table>
<thead>
<tr>
<th>Week</th>
<th>Reading &amp; activities</th>
<th>Projects (due dates)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>About this course; about technical communication (Intro); audience (19); business comm (13)</td>
<td>Get acquainted memo (week 2)</td>
</tr>
<tr>
<td>2</td>
<td>Description (1); technical style (A); headings (7); graphics (11)</td>
<td>Description with headings and graphics (week 4)</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Process &amp; instructions (2); tasks (19 second part); lists (8), notices (9)</td>
<td>Instructions with headings, lists, notices (week 6)</td>
</tr>
<tr>
<td>5</td>
<td>Report format (15)</td>
<td>In-class or lab only</td>
</tr>
<tr>
<td>6</td>
<td>Cause–effect (3); transitions (transitions.html); punctuation (B)</td>
<td>Cause-effect (week 8)</td>
</tr>
<tr>
<td>7</td>
<td>Writing teams (22)</td>
<td>In-class or lab only</td>
</tr>
<tr>
<td>8</td>
<td>Comparisons (4); tables, graphs, charts (10)</td>
<td>Comparison with tables, graphs; or charts (week 10)</td>
</tr>
<tr>
<td>9</td>
<td>Reviewing &amp; revising (18)</td>
<td>In-class or lab only</td>
</tr>
<tr>
<td>10</td>
<td>Definition (5); grammar (C); information search (20); documentation (21)</td>
<td>Extended definition with documented sources (week 12)</td>
</tr>
<tr>
<td>11</td>
<td>Organization (organization.html)</td>
<td>In-class or lab only</td>
</tr>
<tr>
<td>12</td>
<td>Persuasion (6 first part); resumes &amp; application letters (14); business comms (13)</td>
<td>Resume, application letter (week 14)</td>
</tr>
<tr>
<td>13</td>
<td>Oral reports (16)</td>
<td>Oral report (week 14)</td>
</tr>
</tbody>
</table>
Formal Report-Only Course

It’s possible to devise a technical-writing course in which almost every writing project contributes to the formal report (due toward the end of the semester). This approach is particularly good for shorter semesters in which you just don’t have time for multiple application projects. The following plan has a report chapter due every second week and, in between, has students do labs and formatting exercises to familiarize them with other technical-writing applications.

<table>
<thead>
<tr>
<th>Week</th>
<th>Reading &amp; activities</th>
<th>Projects (due dates)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>About this course; about technical communication (Intro); audience (19); business comms (13)</td>
<td>Get acquainted memo (week 2)</td>
</tr>
<tr>
<td>2</td>
<td>Report overview (skim Part 1 applications); report format (15)</td>
<td>In-class or lab only</td>
</tr>
<tr>
<td>3</td>
<td>Persuasion, proposals (6); headings (7)</td>
<td>Proposal (week 5); report chapter (week 7); final report (week 14)</td>
</tr>
<tr>
<td>4</td>
<td>Information search (20); documentation (21)</td>
<td>In-class or lab only</td>
</tr>
<tr>
<td>5</td>
<td>Description (1); graphics (11); technical style (A)</td>
<td>In-class or lab only: format description, informal report, or product specifications</td>
</tr>
<tr>
<td>6</td>
<td>Process &amp; instructions (2); tasks (19 second part); lists (8), notices (9)</td>
<td>In-class or lab only: format process explanation, instructions, or policies– procedures</td>
</tr>
<tr>
<td>7</td>
<td>Cause–effect (3)</td>
<td>In-class or lab only: format cause-effect explanation or primary research report report chapter (week 9)</td>
</tr>
<tr>
<td>8</td>
<td>Comparisons (4); tables, graphs, charts (10)</td>
<td>Comparison with tables, graphs; or charts</td>
</tr>
<tr>
<td>9</td>
<td>Definition (5); grammar (C);</td>
<td>In-class or lab only: format extended definition or background report; report chapter (week 11)</td>
</tr>
<tr>
<td>10</td>
<td>Persuasion (6 first part); resumes &amp; application letters (14); business comms (13)</td>
<td>Resume, application letter (week 14)</td>
</tr>
<tr>
<td>11</td>
<td>Persuasion, progress reports (6)</td>
<td>In-class or lab only: format progress report</td>
</tr>
<tr>
<td>12</td>
<td>Reviewing &amp; revising (18)</td>
<td>In-class or lab only</td>
</tr>
</tbody>
</table>
**Short-Reports Course**

One possibility for a technical-writing course is not to have an elaborate formal report due at the end of the semester at all. The only thing you miss is the formal report with all its before-and-after regalia, although students can format a formal report in a computer lab.

<table>
<thead>
<tr>
<th>Week</th>
<th>Reading &amp; activities</th>
<th>Projects (due dates)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>About this course; about technical communication (Intro); audience (19); business comm (13)</td>
<td>Get acquainted memo (week 2)</td>
</tr>
<tr>
<td>2</td>
<td>Persuasion (6, first part); resumes, application letters (14)</td>
<td>Resume &amp; application letter (week 3)</td>
</tr>
<tr>
<td>3</td>
<td>Description &amp; short reports (1); business communications (13)</td>
<td>Short report using letter or memo format, with headings (week 4)</td>
</tr>
<tr>
<td>4</td>
<td>Headings (7); graphics (11); technical style (A)</td>
<td>In-class or lab only</td>
</tr>
<tr>
<td>5</td>
<td>Lists (8); notices (9)</td>
<td>In-class or lab only</td>
</tr>
<tr>
<td>6</td>
<td>Process &amp; instructions (2); tasks (19 second part); lists (8), notices (9)</td>
<td>Instructions with headings, lists, notices (week 7)</td>
</tr>
<tr>
<td>7</td>
<td>Punctuation (B)</td>
<td>In-class or lab only</td>
</tr>
</tbody>
</table>
| 8    | Persuasion & proposals (6)  
Comparison & recommendation reports (4) | Proposal: recommendation study, formatted as business letter (week 9)  
Recommendation report, formatted as business letter (week 13 or 14) |
| 9    | Information search (20); documentation (21) | In-class or lab only |
| 10   | Tables (10); report format (15) | In-class or lab only practice formatting a formal report |
| 11   | Persuasion & progress report (6) | Progress report on the recommendation study (week 11) |
| 12   | Grammar (C); reviewing & revising (18) | In-class or lab only |
Team-Based Report Course

If you set up the course using the suggestions in Chapter 22 and the related chapter in this instructor manual, your students will have plenty of writing to do. It will not be the range of applications you might want; however, every team member will do plenty of writing. And you can give your students plenty of exposure to a range of technical-writing applications by having them do the formatting work in class or in the computer lab.

<table>
<thead>
<tr>
<th>Week</th>
<th>Reading &amp; activities</th>
<th>Projects (due dates)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>About this course; about technical communication (Intro); audience (19); business comm (13)</td>
<td>Get acquainted memo (week 1)</td>
</tr>
<tr>
<td>2</td>
<td>Persuasion (6); resumes &amp; application letters (14)</td>
<td>Resume &amp; application letter (week 3)</td>
</tr>
<tr>
<td></td>
<td>Teams (22)</td>
<td>Assemble teams; team description memo (week 2)</td>
</tr>
<tr>
<td>3</td>
<td>Report overview (skim Part 1 applications); report format (15)</td>
<td>Project description memo (week 3)</td>
</tr>
<tr>
<td>4</td>
<td>Headings (8); lists (9)</td>
<td>Team schedule memo (week 4)</td>
</tr>
<tr>
<td></td>
<td>Persuasion, proposals (6)</td>
<td>In class or lab practice: headings, lists</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Team-written project proposal (week 5)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Final draft (week 14)</td>
</tr>
<tr>
<td>5</td>
<td>Process, policies–procedures (2) Information search (20); documentation (21)</td>
<td>Team rules memo (week 5)</td>
</tr>
<tr>
<td>6</td>
<td>Tables (10), graphics (11)</td>
<td>Information-resources list (week 6)</td>
</tr>
<tr>
<td></td>
<td>Process &amp; instructions (2); tasks (19 second part); notices (9)</td>
<td>In-class or lab only: format process explanation, instructions, or policies–procedures</td>
</tr>
<tr>
<td>7</td>
<td>Outlining (outlining.html)</td>
<td>Project outline (week 7)</td>
</tr>
<tr>
<td>8</td>
<td>Highlighting (12)</td>
<td>Project prototype &amp; style guide (week 8)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>In class or lab highlighting exercises</td>
</tr>
<tr>
<td>10</td>
<td>Reviewing, revising (18)</td>
<td>First review: review memos (week 10)</td>
</tr>
<tr>
<td>11</td>
<td>Persuasion, progress reports (6)</td>
<td>Team-written progress report (week 11)</td>
</tr>
<tr>
<td>12</td>
<td></td>
<td>Second review: review memos (week 12)</td>
</tr>
<tr>
<td>14</td>
<td></td>
<td>Final draft due</td>
</tr>
</tbody>
</table>
Online-Documents Course

Now that the Internet Age is fully under weigh, why not make all the assignments online documents in one form or another?

<table>
<thead>
<tr>
<th>Week</th>
<th>Reading &amp; activities</th>
<th>Projects (due dates)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>About this course; about technical communication (Intro); audience (19); business comm (13)</td>
<td>Get acquainted memo (week 2)</td>
</tr>
<tr>
<td>2</td>
<td>Hypertext &amp; web pages (17); headings (7); lists (8)</td>
<td>In class or lab practice and formatting</td>
</tr>
<tr>
<td>3</td>
<td>Persuasion (6, first part); resumes, application letters (14)</td>
<td>In class or lab: formatting resumes and application letters. Online resume &amp; applic. letter (week 5)</td>
</tr>
<tr>
<td>4</td>
<td>Lab meetings</td>
<td>——</td>
</tr>
<tr>
<td>5</td>
<td>Notices (9); graphics (11)</td>
<td>In class or lab practice and formatting</td>
</tr>
<tr>
<td>6</td>
<td>Instructions (2); tasks (19, second part); highlighting (12)</td>
<td>Online instructions with headings, lists, notices (week 8)</td>
</tr>
<tr>
<td>7</td>
<td>Tables, graphs, charts (10)</td>
<td>In class or lab practice and formatting</td>
</tr>
<tr>
<td>8</td>
<td>Lab meetings</td>
<td>——</td>
</tr>
<tr>
<td>9</td>
<td>Comparison &amp; recommendation reports (4)</td>
<td>Online recommendation report (week 12)</td>
</tr>
<tr>
<td>10</td>
<td>Information search (20); documentation (21)</td>
<td>In class or lab practice and formatting</td>
</tr>
<tr>
<td>11</td>
<td>Progress reports, proposals (6)</td>
<td>In class or lab: formatting proposals and progress reports.</td>
</tr>
<tr>
<td>12</td>
<td>Grammar (C); review &amp; revising (18)</td>
<td>In class or lab practice</td>
</tr>
<tr>
<td>13</td>
<td>Technical style (A); punctuation (B)</td>
<td>In class or lab practice</td>
</tr>
</tbody>
</table>
## Multimedia Course

You can make your technical communication course live up to its lofty name by including oral-presentation projects, online projects, presentation-software projects, graphics as well as conventional writing projects.

<table>
<thead>
<tr>
<th>Week</th>
<th>Reading &amp; activities</th>
<th>Projects (due dates)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>About this course; about technical communication (Intro); audience (19); business comm (13)</td>
<td>Get acquainted memo (week 2)</td>
</tr>
<tr>
<td></td>
<td>Persuasion (6); resumes &amp; application letters (14)</td>
<td>Resume &amp; application letter (week 3)</td>
</tr>
<tr>
<td>2</td>
<td>Description &amp; short reports (1); business communications (13); technical style (A)</td>
<td>In this first project, students focus on the elements and format of the standard printed formal report (although a brief one). However, they use templates and character and paragraph styles.</td>
</tr>
<tr>
<td>3</td>
<td>Headings (7); lists (8)</td>
<td>In class or lab: formatting resumes and application letters.</td>
</tr>
<tr>
<td>4</td>
<td>Report format (15); templates (13); paragraph styles (7); character styles (11)</td>
<td>In this next portion of the course, students present instructions as a set of web pages.</td>
</tr>
<tr>
<td>5</td>
<td>Persuasion (6), resumes, application letters (14)</td>
<td>In class or lab: formatting proposals and progress reports.</td>
</tr>
<tr>
<td>6</td>
<td>Instructions (2); tasks (19 second part); notices (8); highlighting (12)</td>
<td>In this final portion of the course, students create a recommendation report that they present by means of presentation software (such as Microsoft Powerpoint).</td>
</tr>
<tr>
<td>7</td>
<td>Hypertext &amp; web pages (17)</td>
<td>Online instructions with headings, lists, notices (week 9)</td>
</tr>
<tr>
<td>8</td>
<td>Tables, graphs, charts (10); graphics (11)</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Progress reports, proposals (6)</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Recommendation reports (4); tables (10); information search (20); documentation (21)</td>
<td>Recommendation-report presentation (week 14)</td>
</tr>
<tr>
<td>11</td>
<td>Oral reports &amp; presentation software (16)</td>
<td></td>
</tr>
</tbody>
</table>
Chapter 1. Description:
Product Specifications and Informal Reports

This chapter in *PowerTools* introduces students to basic strategies for writing descriptions and then applies those strategies to writing specifications and informal reports that contain description. Brief descriptions, processes, definitions, and even instructions are like the practice field of a technical writing course. Students need several of these writing projects to learn the style of technical writing at the sentence and paragraph level. Specifically:

- Writing with specific detail—not generalities or “ball-park guesstimates”
- Using a neutral, objective writing style (no advertising language)
- Incorporating numbers, fractions, decimals, abbreviations, acronyms, and symbols
- Including graphics with appropriate figure titles, labels, source citations, and cross-references from nearby text
- Using headings, lists, notices, tables, and highlighting
- Most importantly, defining and writing for specific audiences and workplace situations

If you can design a course in which students get some practice in these areas, they will be well-prepared for the more challenging applications later in the semester—such as the formal technical report or instructions.

Study Units & Writing Assignments

When you plan your course schedule, assign chapters from Parts 2 and 3 of *Power Tools* concurrently with the Part 1 chapters that you use. Obviously, you can’t cover all of the Parts 2, 3, 4, and 5 chapters before having students write a simple description so here are some strategies:

- Make sure that students learn about audience analysis (Chapter 19) before this unit or at the beginning of this unit.
- Have students learn some standards for symbols, abbreviations, acronyms, and numbers (Appendix A). These issues are likely to come up when they write their descriptions, informal reports, or specifications.
- Give students an introduction to graphics (Chapter 11) and have them incorporate graphics in the writing projects they do for this unit.
- Have students learn report format (Chapter 15) if they write an informal report or product specifications.
- Save the chapters on headings, lists, and tables for other units.

The following pages provide different lesson plans for descriptions, informal reports, and specifications. Just yank out the chapters you’ve already covered earlier in the semester:
### Description unit: less-experienced writers

<table>
<thead>
<tr>
<th>Chapter 1</th>
<th>Read this chapter on description, specifications, and informal reports—all of it in order to get a complete picture.</th>
<th>Take the reading quiz. Do labs 1, 2, and 3 (in the following pages).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter 19</td>
<td>Read this chapter on audience analysis.</td>
<td>Take the reading quiz. Do as many of exercises 1 through 5 in chapter 19 as you have time.</td>
</tr>
<tr>
<td>Appendix A</td>
<td>Read this appendix on abbreviations, acronyms, and symbols.</td>
<td>Take the reading quiz. Do exercises 1 and 2 in Appendix A.</td>
</tr>
<tr>
<td>Chapter 1</td>
<td>Do the description-formatting lab. (This can be a lab or an in-class exercise.)</td>
<td>Do project 1 (in the following pages).</td>
</tr>
<tr>
<td>Write a single-paragraph description.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Description unit: more-experienced writers

<table>
<thead>
<tr>
<th>Chapter 1</th>
<th>Read this chapter on description, specifications, and informal reports—all of it in order to get a complete picture.</th>
<th>Take the reading quiz. Do labs 1, 2, and 3 (in the following pages).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter 19</td>
<td>Read this chapter on audience analysis.</td>
<td>Take the reading quiz. Do as many of exercises 1 through 5 in chapter 19 as you have time.</td>
</tr>
<tr>
<td>Chapter 7</td>
<td>Read this chapter and use headings in your description.</td>
<td></td>
</tr>
<tr>
<td>Chapter 8</td>
<td>Read this chapter on bulleted and numbered lists.</td>
<td></td>
</tr>
<tr>
<td>Chapter 10</td>
<td>Read this chapter on tables, graphs, and charts.</td>
<td></td>
</tr>
<tr>
<td>Chapter 11</td>
<td>Read this chapter and incorporate graphics in your description.</td>
<td></td>
</tr>
<tr>
<td>Appendix A</td>
<td>Read this appendix on abbreviations, acronyms, and symbols.</td>
<td>Take the reading quiz. Do exercises 1 and 2 in Appendix A.</td>
</tr>
</tbody>
</table>
# Description unit: more-experienced writers

<table>
<thead>
<tr>
<th>Chapter 1</th>
<th>Read this chapter on description, specifications, and informal reports—all of it in order to get a complete picture.</th>
<th>Take the reading quiz. Do labs 1, 2, and 3 (in the following pages).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter 1</td>
<td>Do the description-formatting lab.</td>
<td>(This can be a lab or an out-of-class assignment.)</td>
</tr>
<tr>
<td>———</td>
<td>Write a multiple-paragraph description.</td>
<td>Do project 3 (in the following pages).</td>
</tr>
</tbody>
</table>

# Informal-report or product-specifications unit

<table>
<thead>
<tr>
<th>Chapter 1</th>
<th>Read this chapter on description, specifications, and informal reports—all of it in order to get a complete picture.</th>
<th>Take the reading quiz. Do labs 1, 2, and 3 (in the following pages).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter 19</td>
<td>Read this chapter on audience analysis.</td>
<td></td>
</tr>
<tr>
<td>Chapter 7</td>
<td>Read this chapter and use headings in your description.</td>
<td></td>
</tr>
<tr>
<td>Chapter 8</td>
<td>Read this chapter on bulleted and numbered lists.</td>
<td></td>
</tr>
<tr>
<td>Chapter 10</td>
<td>Read this chapter on tables, graphs, and charts.</td>
<td></td>
</tr>
<tr>
<td>Chapter 11</td>
<td>Read this chapter and incorporate graphics in your description.</td>
<td></td>
</tr>
<tr>
<td>Chapter 12</td>
<td>Read this chapter on report format, in particular, letter and memo reports</td>
<td></td>
</tr>
<tr>
<td>Appendix A</td>
<td>Read this appendix on abbreviations, acronyms, and symbols.</td>
<td></td>
</tr>
<tr>
<td>Chapter 1</td>
<td>Do the description-formatting lab.</td>
<td>(This can be a lab or an out-of-class assignment.)</td>
</tr>
<tr>
<td>———</td>
<td>Write an informal report or product specifications.</td>
<td>Do project 3 for the informal report or project 4 for specifications.</td>
</tr>
</tbody>
</table>

*Informal reports and product specifications are mid-semester projects. Design your schedule so that you’ve covered as much of Chapter 7, Chapter 8, Chapter 11, Chapter 19, Appendix A as possible.*

*That leaves Chapter 12, which is a good fit for this unit.*
Teaching Ideas

Here are some suggestions for things to do in class to get students ready to write descriptions, specifications, or informal reports:

*Give the chapter reading quiz.* Have students read the chapter and take the reading quiz—either in class or in the lab. Discussing the answers is a good way to get students thinking about the concepts and strategies in this chapter.

*Use the labs.* The labs for this chapter involve identifying description and the sources of description as well as planning and formatting descriptions. You can also do these labs in the regular classroom as well as a computer lab.

*Deal with the dumb-description issue.* Inevitably, students will balk at the idea of writing a description of a simple object, especially if they’ve taken the chapter on audience and workplace focus to heart. They’ll ask you, “Who would ever need a description of a corkscrew?” While these students certainly have a point, explain that they need some way to practice technical writing fundamentals before launching into the real-world applications. Also, try the idea of the high-level manufacturing specifications—even corkscrews need manufacturers!

*Anticipate terminology problems.* Another problem with descriptions is that most students will not know the technical names for components, materials, and finishes of the things they are describing. Have them look in the resources listed in Chapter 1 for that terminology.

*Exorcise advertising and telegraphic writing styles.* In our advertising-saturated society, it’s not surprising that students’ writing for technical writing courses will “congratulate” us buying the “new, improved” Wizzy-Widget which will give us years of “superb performance.” Unless you want your students to get it out of their systems, urge them to keep the marketing hype out of their descriptions. Similarly, students may want to write like robots, deleting all articles and other “understood” words. Exorcise that demon too.

*Analyze existing descriptions.* One way to make students aware of the content, organization, format, and style issues related to descriptions is to take them on a careful tour of one or more descriptions in class. You can use the example descriptions in Chapter 1, showing students how:

- descriptions are organized by parts or characteristics.
- headings mark off the discussion of the different parts.
- introductions contain an overall description.
- numbers (digits) are used for exact values, even below ten.
- symbols and abbreviations are used.
- graphics with labels are used to illustrate things being described.
• descriptions meet the needs of a specific audience in a specific workplace situation.

“Walk through” a description project. An interesting thing to do with the class is to “walk through” the phases of planning and writing a description—or as much of it as possible in a classroom meeting. Use a computer projector so that students can see the simple description emerge before their very eyes. Start with a simple object, such as a corkscrew; see what realistic situations the class can think of; or start with workplace audiences or situations—get students to imagine what descriptions they might require. Move on to dividing the object into parts, finding names for those parts, planning the descriptive detail (using the sources of description discussed in Chapter 1), and perhaps drafting the introduction (with its overall description) and one of the part descriptions.
Technical-Writing Lab — Description

In this lab, you’ll get some practice planning and formatting descriptions, and their main applications—product specifications and informal reports. All of the links in the following are available at:

www.io.com/~hcexres/power_tools/description/

Chapter 1 — Reading Quiz

Before this lab, make sure you’ve read Chapter 1 and made a score on the reading quiz for this chapter as required by your instructor. This reading quiz is available at the following web address and can be e-mailed directly to your instructor:

www.io.com/~hcexres/power_tools/description/description_quiz.html

Lab 1 — Identifying Description

We use the word “description” so loosely that it’s hard to get used to thinking about the word as it is used in Chapter 1. Go to the following web address, and identify which excerpts use description:

www.io.com/~hcexres/power_tools/description/identify_description.html

Lab 2 — Planning Descriptions

As you know from Chapter 1, the part-by-part or characteristic-by-characteristic approach is the recommended way to plan and organize a description. Go to the following web address, and identify which topic lists use one of these two recommended approaches:

www.io.com/~hcexres/power_tools/description/plan_description.html

Lab 3 — Using the Sources of Description

Chapter 1 points out that descriptions are often lacking in detail and that a good way to build in lots of detail is to use the sources of description as a planning and reviewing tool. Go to the following web address, and identify the sources of description used in the excerpts:

www.io.com/~hcexres/power_tools/description/sources_description.html
Technical-Writing Lab — Formatting Descriptions

In this lab, you use unformatted text to develop a well-designed description for print, online, or both — as required by your instructor. (This lab assumes that you’ve studied the chapters on headings, lists, and graphics.)

Word-processing document

In this lab, you add headings, lists, and illustrations to the unformatted text of a description:

1. Go to the following web address, copy the text at that address, and paste it into your preferred word-processing software:
   www.io.com/~hcexres/power_toolsgetDescription/description_formatA.html

2. Study the unformatted text carefully, rearrange the paragraphs as necessary, add headings, and reformat text as numbered or bulleted lists as necessary.

3. Go back to the web address mentioned above, and copy the graphics for the text you are working on. Insert those graphics where they belong in the text, and add labels, figure titles, and cross-references.

4. Put your name, Description Format A, and the date on this document, and print it out for your instructor.

Web-page document

For this second part, do the same things that you did in the preceding but for a web page. To be ready for this project, you need to have have studied Chapter 17 and done at least one other web-page formatting project:

1. Using a simple text editor or web-page editor of your choice, create a simple web page like the one shown in Chapter 17 entitled My First Web Page. Between the <TITLE> and </TITLE> tags and between the <H1> and </H1> tags, substitute Web Page Description.

2. Go to the following web address, copy the text at that address, and paste it into the web page you just started:
   www.io.com/~hcexres/power_tools/description/description_formatB.html

3. Study the unformatted text carefully, rearrange the paragraphs as necessary, add headings, and reformat text as numbered or bulleted lists as necessary.

4. Go back to the web address mentioned above, and copy the graphics for the text you are working on. Insert those graphics where they belong in the text, and add labels and figure titles, and cross-references.

5. Put your name, Description Format B, and the date on this document, and print it out for your instructor.
Project 1 — Brief Technical Description

Using the discussion and examples in Chapter 1, plan and write a short technical description of about 8 to 12 sentences. Here are the essential requirements:

1. Describe the audience and that audience’s need for the description (including the workplace situation in which the description is needed). Attach this audience information to the end of your description.
2. Toward the beginning of this description, provide a definition of the thing you are describing.
3. Toward the beginning of this description, include an overall description of the thing you are describing.
4. Describe the thing part by part, characteristic by characteristic, or both.
5. Provide plenty of detail: use the sources of description to think of as much detail as you can, but make sure that detail is appropriate for the audience.
6. Use numbers, abbreviations, acronyms, and symbols according to a standard (such as those recommended in Appendix A or by your instructor).
7. Consult with your instructor concerning graphics for this description and how to incorporate them. (If you’ve not studied the Chapter 11 on graphics yet, consider including text boxes with brief descriptions of the graphics you would use.)
8. Ensure that your description meets your targeted audience’s needs and comprehension level (for example, by defining potentially unfamiliar terms).
9. In this description, avoid advertisement-style writing and telegraphic-style writing.
10. As with all writing projects in this course, use the standards of good writing, including punctuation, grammar, usage, and spelling.
Using the discussion and examples in Chapter 1, plan and write a technical description of 3 to 5 paragraphs. Here are the essential requirements:

1. Describe the **audience** and that audience’s need for the description (including the workplace situation in which the description is needed). Attach this audience information to the end of your description.

2. Toward the beginning of this description, provide a **definition** of the thing you are describing.

3. Toward the beginning, include an **overall description** of the thing you are describing.

4. Describe the thing **part by part, characteristic by characteristic**, or both.

5. Provide plenty of **detail**: use the sources of description to think of as much detail as you can, but make sure that detail is appropriate for the audience.

6. If you’ve studied Chapter 7, use **headings** to identify the different sections of this description. If you’ve studied Chapter 8 and 10, use **lists** and **tables** whenever possible as more efficient methods of presenting information.

7. Use **numbers, abbreviations, acronyms**, and **symbols** according to a standard (such as those recommended in Appendix A or by your instructor).

8. Consult with your instructor concerning **graphics** for this description and how to incorporate them. (If you’ve not studied the Chapter 11 on graphics yet, consider including text boxes with brief descriptions of the graphics you would use.)

9. Ensure that your description meets your targeted audience’s needs and comprehension level (for example, by defining potentially unfamiliar terms).

10. In this description, avoid **advertisement-style** writing and **telegraphic-style** writing.

11. As with all writing projects in this course, use the **standards** of good writing, including punctuation, grammar, usage, and spelling.
Project 3 — Informal Report

Using the discussion and examples in Chapter 1, plan and write an informal report. Here are the essential requirements:

1. Find or invent a situation in which someone needs an informal report—for example, a site or inspection report, accident report, trip report, or investigative report.

2. Describe the audience of this informal report in terms of its background and its uses and needs for the report. Attach this audience information to the end of the informal report.

3. Format this report as a business letter or memo, depending on the audience. (See Chapter 13 on report format for details.)

4. Use the part-by-part or characteristic-by-characteristic approach.

5. Provide any narration that is needed as well as discussion of causes, effects, or other elements.

6. Provide plenty of detail; use the sources of description to think of as much detail as you can that is appropriate for the audience.

7. If you’ve studied Chapter 7, use headings to identify the different sections of this informal report. If you’ve studied Chapter 8 and 10, use lists and tables as more efficient methods of presenting information whenever possible.

8. Use numbers, abbreviations, acronyms, and symbols according to a standard (such as those recommended in Appendix A or by your instructor).

9. Consult with your instructor concerning graphics for this informal report and how to incorporate them. (If you’ve not studied the Chapter 11 on graphics yet, consider including text boxes with brief descriptions of the graphics you would use.)

10. Ensure that your informal report meets your targeted audience’s needs and comprehension level (for example, by defining potentially unfamiliar terms).

11. As with all writing projects in this course, use the standards of good writing, including punctuation, grammar, usage, and spelling.
Project 4 — Product Specifications

Using the discussion in Chapter 1 and the examples at www.io.com/~hcexres/power_tools/examples, write a set of product specifications using these requirements:

1. Find a simple product and develop a situation in which you must write specifications for it. Describe the audience for these specifications in terms of how that audience will use your specifications, how much detail that audience needs, and how much technical background that audience has. Attach this audience information to the end of these specifications.

2. Write a set of physical, construction, or manufacturing specifications. (Don’t write operational specifications; they are too much like process explanations or instructions, discussed elsewhere in Power Tools.)

3. Use the writing-style requirements discussed in Chapter 1 (including, for example, the use of “may” and “shall”). While a certain amount of terse writing style is appropriate in specifications, avoid advertisement-style writing.

4. Include a scope and definitions section, which defines the limits of your specifications and key terms you use in those specifications.

5. Include a general description of the product for which you are providing specifications.

6. If applicable to the product for which you are providing specifications, include a materials section.

7. Include a design section in which you provide details on each part of the product so that your readers can use these specifications according to their needs.

8. If necessary, provide a brief operating-characteristics section for these specifications.

9. Include an introduction that indicates the topic, purpose, and audience of these specifications and provides an overview of what you cover.

10. If you’ve studied Chapter 7, use headings to identify the different sections of these specifications. If you’ve studied Chapter 8 and 10, use lists and tables as more efficient methods of presenting information whenever possible.

11. Use numbers, abbreviations, acronyms, and symbols according to a standard (such as those recommended in Appendix A or by your instructor).

12. Consult with your instructor concerning graphics for these specifications. (If you’ve not studied the Chapter 11 on graphics yet, consider including text boxes with brief descriptions of the graphics you would use.)

13. Ensure that your specifications meet your targeted audience’s needs and comprehension level (for example, by defining potentially unfamiliar terms). As with all writing projects in this course, use the standards of good writing, including punctuation, grammar, usage, and spelling.
Chapter 1 — Reading Quiz

Read Chapter 1 of *Power Tools for Technical Communication* and answer each of the following. (A multiple-choice version is available at the website for this book.)

1. Define *description* as the term is used in Chapter 1 of *Power Tools*.

2. Describe the *organizational approach* recommended by Chapter 1 for writing descriptions.

3. Define the *sources of description*, and explain how you use them.

4. Define *product specifications* as the term is used in Chapter 1 of *Power Tools*.

5. Describe the formatting used in *product specifications*.

6. Define the *informal report*.

7. Explain the essential difference between an investigative report and an accident report.

8. Imagine that you must describe a flashlight; make a list of the most important topics you’d cover.

9. In the introduction to a description are several elements that are common to any introduction, but one element is unique to descriptions. What is it?

10. Explain one of the biggest problems with descriptions.
Chapter 2. Process:
Instructions and Policies and Procedures

This chapter in *PowerTools* introduces students to basic strategies for writing about processes and then applies those strategies to writing instructions and policy-and-procedure documents, in which the process infrastructure plays an important role.

Writing about processes is another practice field for technical writing courses. Students need several of these “practice” writing projects to learn the style of technical writing at the sentence and paragraph level. Specifically:

- Writing about technically oriented events or phenomena in a systematic step-by-step manner
- Using a direct writing style such as imperatives and second-person plural (and avoiding the passive) in instructions
- Knowing how to do a task analysis
- Using strong transitions that clarify the sequence of events
- Including graphics with appropriate figure titles, labels, source citations, and cross-references from nearby text
- Using headings, lists, notices, tables, and highlighting
- Most importantly, defining and writing for specific audiences and workplace situations

If you can design a course that gives students some practice in these areas, they will be well-prepared for the more challenging applications later in the semester—such as the formal technical report or instructions.

**Study Units & Writing Assignments**

When you plan your course schedule, assign chapters from Parts 2 and 3 of *Power Tools* concurrently with the Part 1 chapters that you use. Obviously, you can’t cover all of the Parts 2, 3, 4, and 5 chapters before having students write a simple process or set of instructions so here are some strategies:

- Make sure that students learn about audience analysis (Chapter 19) before this unit or at the beginning of this unit.
- Have students learn about numbered and bulleted lists (Chapter 8), notices (Chapter 9), and highlighting (Chapter 11). These are essential in instruction-writing projects.
- Have students learn or review basic comma usage (Appendix B) as well as parallelism, problem modifiers (Appendix C), and passive voice ([www.io.com/~hcexres/power_tools/sentence_style.html](http://www.io.com/~hcexres/power_tools/sentence_style.html)).
- Cover headings (Chapter 7) in some previous unit. Headings are important in instructions and policy–procedure document. Lists, notices, highlighting,
commas, parallelism, problem modifiers, and passive voice are enough for this unit!
• Not sure whether to have students write about a noninstructional process or to write a set of instructions? If you are teaching in a research-oriented institution, a science-oriented noninstructional process might be a good idea. If it’s a practical, hands-on milieu, jump right into instructions.

The following pages provide different lesson plans for process discussions, instructions, and policy–procedure documents. Just yank out the chapters you’ve already covered earlier in the semester:

<p>| Process Unit          |                             | Take the reading quiz. |                             |
|-----------------------|                             | Do labs 1, 2, and 3 (in the following pages). |
| Chapter 2             | Read this chapter on process, instructions, and policy-procedure documents—all of it in order to get a complete picture. |                             |                             |
| Chapter 19            | Read this chapter on audience analysis. |                             | Take the reading quiz. |
| Chapter 7             | Read this chapter on headings (but try to cover headings before this unit). |                             | Do labs 1, 2, and 3. |
| Chapter 8             | Read this chapter on numbered, bulleted, and other kinds of lists. |                             | Take the reading quiz. Do labs 1, 2, and 3. |
| Appendix B            | Read the part of this appendix on commas. |                             | Take the reading quiz. Do exercises 1 and 2. |
| <strong>Power Tools website</strong> | Read the part on problem modifiers at <a href="http://www.io.com/~hcexres/power_tools/grammar.html">www.io.com/~hcexres/power_tools/grammar.html</a>. |                             | Do the available exercises |
| <strong>Power Tools website</strong> | Read about passive voice at <a href="http://www.io.com/~hcexres/power_tools/sentence_style.html">www.io.com/~hcexres/power_tools/sentence_style.html</a> |                             | Do the available exercises. |
| ——                    | Do the instructions-formatting lab (in the following pages). |                             | (This can be a lab or an in-class exercise.) |</p>
<table>
<thead>
<tr>
<th>Instructions Unit</th>
</tr>
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<tbody>
<tr>
<td><strong>Chapter 2</strong></td>
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<td><strong>Chapter 19</strong></td>
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<td><strong>Chapter 7</strong></td>
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<td><strong>Appendix B</strong></td>
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<td><strong>Power Tools</strong></td>
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<td><strong>Power Tools</strong></td>
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<td>——</td>
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</tbody>
</table>
### Teaching Ideas

Here are some suggestions for things to do in class to get students ready to write process discussions, instructions, and policy–procedure documents:

**Give the chapter reading quiz.** Have students read the chapter and take the reading quiz—either in class or in the lab. Discussing the answers is a good way to get students thinking about the concepts and strategies in this chapter.

**Use the labs.** The labs for this chapter involve identifying processes and writing style in processes as well as formatting processes and instructions. You can also do these labs in the regular classroom as well as a computer lab.

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### Policies-Procedures Unit

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Reading/Activity</th>
<th>Additional Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter 2</td>
<td>Read this chapter on process, instructions, and policy-procedure documents—all of it in order to get a complete picture.</td>
<td>Take the reading quiz. Do exercises 1, 2, and 3 (in the following pages).</td>
</tr>
<tr>
<td>Chapter 19</td>
<td>Read this chapter on audience analysis.</td>
<td>Take the reading quiz. Do as many of exercises 1 through 5 in chapter 19 as you have time for.</td>
</tr>
<tr>
<td>Chapter 7</td>
<td>Read this chapter on headings (but try to cover headings before this unit).</td>
<td>Take the reading quiz. Do labs 1, 2, and 3.</td>
</tr>
<tr>
<td>Chapter 8</td>
<td>Read this chapter on numbered, bulleted, and other kinds of lists.</td>
<td>Take the reading quiz. Do labs 1, 2, and 3.</td>
</tr>
<tr>
<td>Appendix B</td>
<td>Read the part of this appendix on commas.</td>
<td>Take the reading quiz. Do exercises 1 and 2.</td>
</tr>
<tr>
<td><strong>Power Tools website</strong></td>
<td>Read the part on problem modifiers at <a href="http://www.io.com/~hcexres/power_tools/grammar.html">www.io.com/~hcexres/power_tools/grammar.html</a>.</td>
<td>Do the available exercises.</td>
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<tr>
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<td>Do the available exercises.</td>
</tr>
</tbody>
</table>

**Less-experienced writers:** write a single-page set of policies and procedures (without headings).  
**More-experienced writer:** write a several-page set of policies and procedures (with headings).  
Do project 5 (in the following pages).
Dumb processes. As with simplistic descriptions, students may balk at the idea of writing about processes such as photosynthesis, mitosis, eclipses, and such—especially if they’ve taken the chapter on audience and workplace focus to heart. They’ll ask you, “Why should I write about the water cycle? People can read it about in any encyclopedia.” While these students certainly have a point, we still need some way to practice technical writing fundamentals before launching into the real-world applications.

Advertising language. As with descriptions, students may want to lard their processes and instructions with advertising language. Urge them to avoid congratulating you for buying the “new, improved” Robo-Widget which will give us years of “superb performance.” Point out that corporate attorneys typically demand that technical writers keep this sort of language out of user guides; these are “claims” that the manufacturer may not be able to substantiate in court.

Analysis of existing processes and instructions. One way to make students aware of the content, organization, format, and style issues related to process discussions and instructions is to take them on a careful tour of one or more such documents in class. You can use the examples in Chapter 2, showing students how:

- process explanations are organized by phases (groups of steps) and steps (groups of actions or events).
- instructions are organized by tasks (common user activities).
- headings mark off the discussion of the different phases or tasks.
- numbered lists are used whenever a sequence of events or actions is discussed.
- imperative and second-person plural writing is used.
- passive voice is typically ineffective in instructions.
- danger, caution, and warning notices use special formats to alert readers to potential problems.
- highlighting (such as bold, italics, alternate fonts, and color) is used in a careful, controlled way to emphasize or to “cue” readers to context.
- process explanations and instructions meet the needs of a specific audience in a specific workplace situation.

Process or instructions walk-through. An interesting thing to do with the class is to “walk through” the phases of planning and writing a process explanation or set of instructions—or as much of it as possible in a classroom meeting. Use a computer projector so that students can see the simple process explanation emerge before their very eyes. Start with a simple process, such as washing dishes; see what realistic situations the class can think of; or start with workplace audiences or situations: get students to imagine what process explanations or instructions they might require. Move on to dividing the process into phases or tasks and dividing those into specific events or actions, and perhaps drafting the introduction and a paragraph on one of the phases or tasks.
Technical-Writing Lab — Processes

In this lab, you’ll get some practice with key aspects of processes and their main applications, instructions and policy-procedure documents. All of the links in the following are available at:

www.io.com/~hcexres/power_tools/process/

Chapter 2 — Reading Quiz

Before this lab, make sure you’ve read Chapter 2 and made a score on the reading quiz for this chapter as required by your instructor. This reading quiz is available at the following web address and can be e-mailed directly to your instructor:

www.io.com/~hcexres/power_tools/process/process_quiz.html

Lab 1 — Identifying Process Explanations

To get used to thinking about processes as they are defined in Chapter 2, go to the following web address, and identify which excerpts use process:

www.io.com/~hcexres/power_tools/process/identify_process.html

Lab 2 — Planning Process Explanations

As you know from Chapter 2, you are encouraged to organize process explanations (especially instructions) using the phases or tasks. Go to the following web address, and identify which topic lists use this recommended approach:

www.io.com/~hcexres/power_tools/process/plan_process.html

Lab 3 — Writing Style in Instructions

Chapter 2 points out that ordinarily, when you write instructions, you should use imperatives and second-person plurals; avoid the passive voice and third person; and watch out for problem modifiers and telegraphic writing. Go to the following web address, and identify these writing styles and grammar problems:

www.io.com/~hcexres/power_tools/process/writing_style.html
Technical-Writing Lab — Formatting Process Explanations

In this lab, you use unformatted text to develop a well-designed process explanation for print, online, or both — as required by your instructor. (This lab assumes that you’ve studied the chapters on headings, lists, and graphics.)

Word-processing document

In this lab, you add headings, lists, and illustrations to the unformatted text of a process explanation:

1. Go to the following web address, copy the text at that address, and paste it into your preferred word-processing software:
   www.io.com/~hcexres/power_tools/process/process_formatA.html

2. Study the unformatted text carefully, rearrange the paragraphs as necessary, add headings, and reformat text as numbered or bulleted lists as necessary.

3. Go back to the web address mentioned above, and copy the graphics for the text you are working on. Insert those graphics where they belong in the text, and add labels and figure titles, and cross-references.

4. Put your name, Process Format A, and the date on this document, and print it out for your instructor.

Web-page document

For this second part, do the same things that you did in the preceding but for a web page. To be ready for this project, you need to have studied Chapter 17 and have done at least one other web-page formatting project:

1. Using a simple text editor or web-page editor of your choice, create a simple web page like the one shown in Chapter 17 entitled My First Web Page. Between the <TITLE> and </TITLE> tags and between the <H1> and </H1> tags, substitute Web Page Process Explanation.

2. Go to the following web address, copy the text at that address, and paste it into the web page you just started:
   www.io.com/~hcexres/power_tools/process/process_formatB.html

3. Study the unformatted text carefully, rearrange the paragraphs as necessary, add headings, and reformat text as numbered or bulleted lists as necessary.

4. Go back to the web address mentioned above, and copy the graphics for the text you are working on. Insert those graphics where they belong in the text, and add labels and a figure title, and a cross-references.

5. Put your name, Process Format B, and the date on this document, and print it out for your instructor.
Technical-Writing Lab — Formatting Instructions

In this lab, you use unformatted text to develop well-designed instructions for print, online, or both — as required by your instructor. (This lab assumes that you’ve studied the chapters on headings, lists, notices, and graphics.)

Word-processing document

In this lab, you add headings, lists, notices, and illustrations to the unformatted text of a set of instructions:

1. Go to the following web address, copy the text at that address, and paste it into your preferred word-processing software:
   www.io.com/~hcexres/power_tools/process/instrux_formatA.html

2. Study the unformatted text, rearrange the paragraphs as necessary, add headings, and reformat text as numbered lists, bulleted lists, and special notices as necessary.

3. Go back to web address mentioned above, and copy the graphics for the text you are working on. Insert those graphics where they belong in the text, and add labels and figure titles, and cross-references.

4. Put your name, Instructions Format A, and the date on this document, and print it out for your instructor.

Web-page document

For this part, do the same things that you did in the preceding but for a web page. To be ready for this project, you need to have studied Chapter 17 and have done at least one other web-page formatting project:

1. Using a simple text editor or web-page editor of your choice, create simple web page like the one shown in Chapter 17 entitled My First Web Page. Between the <TITLE> and </TITLE> tags and between the <H1> and </H1> tags, substitute Web Page Instructions.

2. Go to the following web address, copy the text at that address, and paste it into your preferred word-processing software:
   www.io.com/~hcexres/power_tools/process/instrux_formatB.html

3. Study the text carefully, rearrange the paragraphs as necessary, add headings, and reformat text as numbered lists, bulleted lists, and special notices as necessary.

4. Go back to web address mentioned above, and copy the graphics for the text you are working on. Insert those graphics where they belong in the text, and add labels and a figure title, and a cross-references.

5. Put your name, Instructions Format B, and the date on this document, and print it out for your instructor.
Project 1 — Brief Process Explanation

Using the discussion and examples in Chapter 2, plan and write a short process explanation of about 8 to 12 sentences. Here are the essential requirements:

1. Describe the audience and that audience’s need for the process explanation (including the workplace situation in which it is needed). Attach this audience information to the end of your process explanation.

2. Toward the beginning of this process explanation, provide a definition of the process you are about to explain.

3. Discuss the process you’re explaining in steps or phases.

4. Provide supplemental information to help readers understand the steps or phases: for example, description, causes, effects, or examples.

5. Make sure that you follow the punctuation guidelines for introductory, compound, nonrestrictive, and series elements as presented in Appendix B. Watch for modifier problems as discussed www.io.com/~hcexres/power_tools/grammar.html.

6. Consult with your instructor concerning graphics for this process and how to incorporate them. (If you’ve not studied the Chapter 11 on graphics yet, consider including text boxes with brief descriptions of the graphics you would use.)

7. Ensure that your process explanation meets your targeted audience’s needs and comprehension level (for example, by defining potentially unfamiliar terms).

8. In this process explanation, avoid advertisement-style writing and telegraphic-style writing.

9. As with all writing projects in this course, use the standards of good writing, including punctuation, grammar, usage, and spelling.
Project 2 — Process Explanation

Using the discussion and examples in Chapter 2, plan and write a process explanation of 3 to 5 paragraphs. Here are the essential requirements:

1. Describe the audience and that audience’s need for the process explanation (including the workplace situation in which it is needed). Attach this audience information to the end of your process explanation.

2. Toward the beginning of this process explanation, provide a definition of the process you are about to explain.

3. Discuss the process you’re explaining into steps or phases, preferably with one major step or phase per separate paragraph.

4. Provide supplemental information to help readers understand the steps or phases: for example, description, causes, effects, or examples.

5. If you’ve studied Chapter 7, use headings to identify the different sections of this description. If you’ve studied Chapter 8 and 10, use lists and tables whenever possible as more efficient methods of presenting information.

6. If you’ve studied Chapter 8, use numbered and bulleted lists to emphasize sequences of events and important points.

7. Make sure that you follow the punctuation guidelines for introductory, compound, nonrestrictive, and series elements as presented in Appendix B. Watch for modifier problems as discussed at www.io.com/~hcexres/power_tools/grammar.html.

8. Consult with your instructor concerning graphics for this process and how to incorporate them. (If you’ve not studied the Chapter 11 on graphics yet, consider including text boxes with brief descriptions of the graphics you would use.)

9. Ensure that your process explanation meets your targeted audience’s needs and comprehension level (for example, by defining potentially unfamiliar terms).

10. In this process explanation, avoid advertisement-style writing and telegraphic-style writing.

11. As with all writing projects in this course, use the standards of good writing, including punctuation, grammar, usage, and spelling.
Project 3 — Brief Instructions

Using the discussion and examples in Chapter 2, plan and write a brief set of instructions of about 8 to 12 sentences. Here are the essential requirements:

1. Describe the audience and that audience’s need for these instructions (including the workplace situation in which they are needed). Attach this audience information to the end of the instructions.

2. Toward the beginning of these instructions, provide a definition of the procedure you are about to explain and information about the skills and knowledge needed by the audience.

3. Format the actual steps (actions readers perform) as steps or phases, using the guidelines in Chapter 8.

4. Provide supplemental information to help readers understand the steps: for example, before-and-after descriptions, causes, effects, or examples.

5. Make sure that you follow the punctuation guidelines for introductory, compound, nonrestrictive, and series elements as presented in Appendix B. Watch for modifier problems as discussed at www.io.com/~hcexres/power_tools/grammar.html.

6. Consult with your instructor concerning graphics for these instructions and how to incorporate them. (If you’ve not studied the Chapter 11 on graphics yet, consider including text boxes with brief descriptions of the graphics you would use.)

7. Ensure that your instructions meet your targeted audience’s needs and comprehension level (for example, by defining potentially unfamiliar terms).

8. In these instructions, avoid advertisement-style writing and telegraphic-style writing.

9. As with all writing projects in this course, use the standards of good writing, including punctuation, grammar, usage, and spelling.
Project 4 — Instructions

Using the discussion and examples in Chapter 2, plan and write a set of instructions of 2 to 3 pages. Here are the essential requirements:

1. Describe the audience and that audience’s need for these instructions (including the workplace situation in which they are needed). Attach this audience information to the end of the document.

2. In the first paragraph of these instructions, provide a definition of the procedure you are about to explain, information about the skills and knowledge needed by the audience, and provide an overview of what you’ll be covering.

3. Format the actual procedures (actions readers perform) as steps or phases, using the guidelines in Chapter 8.

4. Provide supplemental information to help readers understand the steps: for example, before-and-after descriptions, causes, effects, or examples.

5. If you’ve studied Chapter 7, use headings to identify the different sections of these instructions. If you’ve studied Chapter 8 and 10, use lists and tables whenever possible as more efficient methods of presenting information.

6. Present special notes, warnings, cautions, and dangers using the notice format as discussed in Chapter 9.

7. If you have studied Chapter 12 on highlighting, make that you use bold, italics, alternate fonts or color, caps, quotation marks, and other such effects consistently and according to a standard.

8. Consult with your instructor concerning graphics and how to incorporate them. (If you’ve not studied the Chapter 11 on graphics yet, consider including text boxes with brief descriptions of the graphics you would use.)

9. Make sure that you follow the punctuation guidelines for introductory, compound, nonrestrictive, and series elements as presented in Appendix B. Watch for modifier problems as discussed at www.io.com/~hcexres/power_tools/grammar.html.

10. Ensure that these instructions meet your targeted audience’s needs and comprehension level (for example, by defining potentially unfamiliar terms).

11. In these instructions, avoid advertisement-style writing and telegraphic-style writing.

12. As with all writing projects in this course, use the standards of good writing, including punctuation, grammar, usage, and spelling.
**Project 5 — Policies and Procedures**

Using the discussion Chapter 2 and the examples at [www.io.com/~hcexres/power_tools/examples](http://www.io.com/~hcexres/power_tools/examples), plan and write a set of policies and procedures of 3 to 5 pages. Here are the essential requirements:

1. Describe the *audience* and that audience’s need for these policies and procedures (including the workplace situation in which they are needed). Attach this audience information to the end of the document.

2. Include a *purposes* section and a *definitions* section, each under its own heading.

3. For each policy, state the *policy* and follow it with *procedures* formatted as steps, as necessary. (See the format used in the examples.)

4. For ease of reference, use the *decimal-style method of labeling* each separate segment of your policies and procedures (as shown in the examples).

5. Format the actual steps (actions readers perform) as *steps* or *phases*, using the guidelines in Chapter 8.

6. If you’ve studied Chapter 7, use *headings* to identify the different sections of these policies and procedures. If you’ve studied Chapter 8 and 10, use *lists* and *tables* whenever possible as more efficient methods of presenting information.

7. Make sure that you follow the *punctuation guidelines* for introductory, compound, nonrestrictive, and series elements as presented in Appendix B. Watch for *modifier problems* as discussed at [www.io.com/~hcexres/power_tools/grammar.html](http://www.io.com/~hcexres/power_tools/grammar.html).

8. Use the style of phrasing that is common to policies and procedures; see the examples.

9. Ensure that your policies and procedures meet your targeted *audience’s needs* and *comprehension level* (for example, by defining potentially unfamiliar terms).

10. As with all writing projects in this course, use the *standards* of good writing, including punctuation, grammar, usage, and spelling.
Chapter 2 — Reading Quiz

Read Chapter 2 of *Power Tools for Technical Communication*, and answer each of the following. (A multiple-choice version is available at the website for this book.)

1. Define *process* as the term is used in Chapter 2 of *Power Tools*.

2. Describe the organizational approach recommended for explaining a process.

3. Explain the difference between *process explanations* and *instructions* as presented in Chapter 2.

4. Define the term *task* as it is used in Chapter 2, and provide several examples.

5. Define the term *notices* as it is used in this chapter, and provide several examples.

6. Explain several reasons why you must worry about *terminology* when you write instructions.

7. What is the recommended format for a step-by-step procedure that must be performed in a required order?

8. Explain the difference between a *policy* and a *procedure*.

9. Explain the difference between *general* policies and *technical* policies.

10. Make topic list for a process explanation or a set of instructions.
Chapter 3. Causes and Effects: Primary Research Reports (Lab Reports)

This chapter in *Power Tools* introduces students to basic strategies for writing about causes and effects and then applies those strategies to writing primary research reports (literature, lab, or field research reports) in which discussion of causes and effects plays an important role.

Writing about causes and effects is another practice field for technical writing courses. Students need several of these “practice” writing projects to learn the style of technical writing at the sentence and paragraph level. Specifically:

- Writing about the causes of a technically oriented problem or situation
- Writing about the real or potential effects, results, or consequences of a problem or situation
- Explaining causes and effects in a systematic, organized way
- Using strong transitions that clarify cause–effect relationships
- Using language to indicate probability, conditions, alternatives, and other non-absolute states
- Including graphics with appropriate figure titles, labels, source citations, and cross-references from nearby text
- Using headings, lists, notices, and tables as necessary
- Most importantly, explain causes and effects for specific audiences and workplace situations

If you can design a course in which students get some practice in these areas, they will be well-prepared for the more challenging applications later in the semester—such as the formal technical report or instructions.

Chapter 3 features one important application of technical writing—the primary research report. Goals for this report should be something like the following:

- Understanding the primary research report as the typical “lab report” or “field report,” which reports and draws conclusions on information gathered from primary sources (experiments, observation, surveys, etc.)
- Understanding the typical parts of the primary research report and the logic that connects those parts
- Understanding how those parts can be modified and combined according to the needs of a specific project
- Keeping the functions and content of data-summary and conclusion sections separate
- Using the proper format and style as required by the organization or journal publishing the primary research report, including documentation style
Study Units & Writing Assignments

When you plan your course schedule, assign chapters from Parts 2 and 3 of Power Tools concurrently with the Part 1 chapters that you use. Obviously, you can’t cover all of the Parts 2, 3, 4, and 5 chapters before having students write a simple causal discussion so here are some strategies:

- Make sure that students learn about audience analysis (Chapter 19) before this unit or at the beginning of this unit.
- Have students learn or review semicolon and colon usage (Appendix B) as well as agreement (Appendix C).
- Have students learn or review transitions (www.io.com/~hcexres/power_tools/transitions.html).
- Cover headings (Chapter 7) in this unit, especially if this unit comes before process and instructions (Chapter 2).

The following pages provide different lesson plans for cause–effect discussions and primary research reports. Just yank out the chapters you’ve already covered earlier in the semester:

<table>
<thead>
<tr>
<th>Cause–Effect Unit</th>
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<tbody>
<tr>
<td>Chapter 3</td>
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<td>Chapter 19</td>
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<tr>
<td>Chapter 7</td>
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<tr>
<td>Appendix B</td>
</tr>
<tr>
<td>Appendix C</td>
</tr>
<tr>
<td>Power Tools website</td>
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<td>——</td>
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</tbody>
</table>
Here are some suggestions for things to do in class to get students ready to write about causes and effects and to write primary research reports:

*Give the chapter reading quiz.* Have students read the chapter and take the reading quiz—either in class or in the lab. Discussing the answers is a good way to get students thinking about the concepts and strategies in this chapter.

*Use the labs.* The labs for this chapter involve identifying cause-effect discussions and the transitions used in them, identifying the parts of primary research reports...
as well as formatting cause–effect discussions and primary research reports. You can also do these labs in the regular classroom as well as in a computer lab.

Diagramming causes and effects. Spend some time with your class defining the obvious or potential causes of a problem or the real or potential effects of a problem. Find ways to diagram the relationships of those situations, problems, causes, and effects. Show your students how those different situations, problems, causes, and effects look in paragraphs of a writing project on the same topic.

Analysis of existing cause–effect explanations. One way to make students aware of the content, organization, format, and style issues related to cause–effect explanations is to take them on a careful tour of one or more such documents in class. You can use the examples in Chapter 3, showing students how:

- causes and effects are discussed systematically, one cause or effect at a time.
- transitions help readers understand what is a cause of what and what is an effect of what.
- transitions also help readers understand the level of certainty about causes and effects.
- headings mark off the discussion of the different problems, situations, causes, or effects.
- cause–effect explanations meet the needs of a specific audience in a specific workplace situation.

Cause–effect walk-through. An interesting thing to do with the class is to “walk through” the phases of planning and writing a cause–effect explanation—or as much of it as possible in a classroom meeting. Use a computer projector so that students can see the simple cause–effect explanation emerge before their very eyes. Start with a simple causal situation, such as a dead car battery; see what realistic situations the class can think of; or start with a workplace audience or situation—get students to imagine what cause–effect explanations they might require. Move on to identifying the causes and effects, diagramming those causes and effects on the board, and perhaps drafting the introduction and a paragraph on one of the causes or effects.
Technical-Writing Lab — Causes and Effects

In this lab, you’ll get some practice planning and formatting cause–effect explanations and their main application, the primary research report. All of the links in the following are available at:

www.io.com/~hcexres/power_tools/cause_effect/

Chapter 3 — Reading Quiz

Before this lab, make sure you’ve read Chapter 3 and made a score on the reading quiz for this chapter as required by your instructor. This reading quiz is available at the following web address and can be e-mailed directly to your instructor:

www.io.com/~hcexres/power_tools/cause_effect/causal_quiz.html

Lab 1 — Identifying Cause–Effect Explanations

To get used to thinking about cause–effect explanations as they are defined in Chapter 3, go to the following web address, and identify which excerpts discuss causes and effects:

www.io.com/~hcexres/power_tools/cause_effect/identify_causal.html

Lab 2 — Transitions in Cause–Effect Explanations

Transitions are critical in cause–effect explanations, enabling readers to understand what causes and effects are being proposed and what the level of certainty is about those causes and effects. Go to the following web address, and identify cause- and effect-related transitions:

www.io.com/~hcexres/power_tools/cause_effect/transitions_causal.html

Lab 3 — Identifying Parts of Primary Research Reports

Primary research reports use a standard structure: that is, specific types of information arranged in a specific way. At the following web address, identify and arrange the parts of primary research reports:

www.io.com/~hcexres/power_tools/cause_effect/primary_research.html
Technical-Writing Lab — Formatting Causal Explanations

In this lab, you use unformatted text to develop a well-designed cause–effect explanation for print, online, or both — as required by your instructor. (This lab assumes that you’ve studied the chapters on headings, lists, and graphics.)

Word-processing document

In this lab, you add headings, lists, and illustrations to the unformatted text of a cause–effect explanation:

1. Go to the following web address, copy the text at that address, and paste it into your preferred word-processing software:

   www.io.com/~hcexres/power_tools/cause_effect/causal_formatA.html

2. Study the unformatted text carefully, rearrange the paragraphs as necessary, add headings, and reformat text as tables, numbered lists, and bulleted lists as necessary.

3. Go back to the web address mentioned above, and copy the graphics for the text you are working on. Insert those graphics where they belong in the text, and add labels, figure titles, and cross-references.

4. Put your name, Cause–Effect Format A, and the date on this document, and print it out for your instructor.

Web-page document

For this second part, do the same things that you did in the preceding but for a web page. To be ready for this project, you need to have studied Chapter 17 and have done at least one other web-page formatting project:

1. Using a simple text editor or web-page editor of your choice, create a simple web page like the one shown in Chapter 17 entitled My First Web Page. Between the <TITLE> and </TITLE> tags and between the <H1> and </H1> tags, substitute Web Page Cause–Effect Explanation.

2. Go to the following web address, copy the text at that address, and paste it into the web page you just started:

   www.io.com/~hcexres/power_tools/cause_effect/causal_formatB.html

3. Study the unformatted text carefully, rearrange the paragraphs as necessary, add headings, and reformat text as tables, numbered lists, and bulleted lists as necessary.

4. Go back to the web address mentioned above, and copy the graphics for the text you are working on. Insert those graphics where they belong in the text, and add labels, figure titles, and cross-references.

5. Put your name, Cause–Effect Format B, and the date on this document, and print it out for your instructor.
Technical-Writing Lab: Formatting Primary Research Reports

In this lab, you use unformatted text to develop a well-designed primary research report for print, online, or both — as required by your instructor. (This lab assumes that you’ve studied the chapters on headings, lists, and graphics.)

**Word-processing document**

In this lab, you add headings, lists, and illustrations to the unformatted text of a primary research report:

1. Go to the following web address, copy the text at that address, and paste it into your preferred word-processing software:
   
   www.io.com/~hcexres/power_tools/cause_effect/research_formatA.html

2. Study the unformatted text carefully, rearrange the paragraphs as necessary, add headings, and reformat text as tables, numbered lists, bulleted lists, and special notices as necessary.

3. Go back to the web address mentioned above, and copy the graphics for the text you are working on. Insert those graphics where they belong in the text, and add labels, figure titles, and cross-references.

4. Put your name, Research-Report Format A, and the date on this document, and print it out for your instructor.

**Web-page document**

For this second part, do the same things that you did in the preceding but for a web page. To be ready for this project, you need to have studied Chapter 17 and have done at least one other web-page formatting project:

1. Using a simple text editor or web-page editor of your choice, create simple web page like the one shown in Chapter 17 entitled My First Web Page. Between the <TITLE> and </TITLE> tags and between the <H1> and </H1> tags, substitute Web Page Primary Research Report.

2. Go to the following web address, copy the text at that address, and paste it into the web page you just started:
   
   www.io.com/~hcexres/power_tools/cause_effect/research_formatB.html

3. Study the unformatted text carefully, and wherever necessary, rearrange paragraphs, add headings and reformat text as tables, numbered lists, bulleted lists, and notices.

4. Go back to the web address, and copy the graphics. Insert those graphics where they belong in the text, and add labels, figure titles, and cross-references.

5. Put your name, Research-Report Format B, and the date on this document, and print it out for your instructor.
Project 1 — Brief Cause–Effect Explanation

Using the discussion and examples in Chapter 3, plan and write a short cause–effect explanation of about 8 to 12 sentences. Here are the essential requirements:

1. Describe the *audience* and that audience’s need for the cause–effect explanation (including the workplace situation in which the cause–effect explanation is needed). Attach this audience information to the end of this document.

2. At the end your cause–effect explanation, also include a *diagram* of the cause–effect relationship you are explaining.

3. Toward the beginning of this cause–effect explanation, identify or define the *topic*: the cause, effect, situation, or problem you are about to explain.

4. Discuss each cause, effect, or both in *systematic, organized way*.

5. Use *supplemental discussion* to help readers understand the causes and effects you are presenting.

6. Use *strong transitions* to signal when the discussion of each new cause or effect begins.

7. Make sure that you clearly indicate the *level of certainty* about your causes and effects.

8. Ensure that your cause–effect explanation meets your targeted *audience’s needs* and *comprehension level* (for example, by defining potentially unfamiliar terms).

9. As with all writing projects in this course, use the *standards* of good writing, including punctuation, grammar, usage, and spelling.
Project 2 — Cause–Effect Explanation

Using the discussion and examples in Chapter 3, plan and write a cause–effect explanation of 3 to 5 paragraphs. Here are the essential requirements:

1. Describe the audience and that audience’s need for the cause–effect explanation (including the workplace situation in which the cause–effect explanation is needed). Attach this audience information to the end of this document.

2. At the end your cause–effect explanation, also include a diagram of the cause–effect relationship you are explaining.

3. In the introduction of this cause–effect explanation, identify or define the topic: the cause, effect, situation, or problem you are about to explain. Provide any necessary background information to help readers get started reading this discussion. Provide an overview of what you’ll be presenting (for example, an in-sentence list of the causes or effects).

4. Discuss each cause, effect, or both in systematic, organized way in a separate paragraph when possible.

5. Use supplemental discussion to help readers understand the causes and effects you are presenting.

6. Use strong transitions to signal when the discussion of each new cause or effect begins.

7. Make sure that you clearly indicate the level of certainty about your causes and effects.

8. Consult with your instructor concerning graphics for this cause–effect explanation and how to incorporate them. (If you’ve not studied the Chapter 11 on graphics yet, consider including text boxes with brief descriptions of the graphics you would use.)

9. Ensure that your cause–effect explanation meets your targeted audience’s needs and comprehension level (for example, by defining potentially unfamiliar terms).

10. As with all writing projects in this course, use the standards of good writing, including punctuation, grammar, usage, and spelling.
Project 3 — Primary Research Report

Using the discussion and examples in Chapter 3, plan and write a primary research report of two or more pages:

1. Identify and analyze an audience that will be reading the report. Define that audience’s use for the report, including the workplace or professional situation in which the report is needed. (See Chapter 19 for analyzing and writing for specific audiences.)

2. Find a project—a simple experiment or survey—on which to do some research and write a primary research report on the results.

3. Include the standard sections used in primary research reports: literature review, methods, findings, conclusions, bibliography.

4. Include an introduction in which you state the topic and purpose of the report, provide a brief bit of background, and provide an overview of what the rest of the report contains.

5. Use headings to indicate the major sections of this report.

6. Use numbered and bulleted lists whenever they can increase the readability of information in this report.

7. Use tables, charts, and graphs as necessary to present your findings.

8. Use a standard system of documentation to indicate the sources of your borrowed information.

9. Ensure that this report meets your targeted audience’s needs and comprehension level (for example, by defining potentially unfamiliar terms). Remember that primary research reports should enable readers to repeat your process.

10. As with all writing projects in this course, use the standards of good writing, including punctuation, grammar, usage, and spelling.
Chapter 3 — Reading Quiz

Read Chapter 3 of *Power Tools for Technical Communication*, and answer each of the following. (A multiple-choice version is available at the website for this book.)

1. Define *primary research report* as the term is used in Chapter 3.

2. Explain why *causes and effects* are so important in primary research reports.

3. *Transitions* are critical in discussing causes and effects. Provide some examples of sentences with transition words and phrases that you would expect to see in cause–effect discussions.

4. Describe a *project* that would require some primary research.

5. Provide an example of a *telescoping* cause–effect relationship.

6. Explain the function of a *scope statement* in an introduction to a cause–effect discussion or in a primary research report.

7. Describe the *organizational approach* that Chapter 3 recommends for any cause–effect discussion.

8. In a primary research report, what is the name of the section containing a *summary of the existing research* related to the research topic?

9. Explain the differences between the *findings section* and the *conclusions section* in a primary research report.

10. Explain the primary reason why primary research reports contain sections on methodology, procedures, equipment, materials, and facilities.
Chapter 4. Comparison: Recommendation, Evaluation, Feasibility Reports

This chapter in *PowerTools* introduces students to basic strategies for writing comparisons and then applies those strategies to writing recommendation, evaluation, and feasibility reports in which comparisons play an important role.

Writing comparisons is still another practice field for technical writing courses. Students need “practice” writing projects involving description, process, cause–effect explanation, and comparison to learn the style of technical writing at the sentence and paragraph level. Specifically, in the case of comparison:

- Identifying points of comparison to use in a systematic comparison of things
- Discussing the differences and similarities of things according to individual points of comparison
- Stating conclusions based on individual comparisons
- Drawing different types of conclusions based on head-on comparisons of things according to individual points of comparison
- Balancing individual conclusions in reaching a final conclusion.
- Using strong transitions to make comparisons clear
- Including graphics with appropriate figure titles, labels, source citations, and cross-references from nearby text
- Using headings and lists as necessary
- Using tables, graphs, and charts to clarify or emphasize important comparisons
- Most importantly, explaining comparisons for specific audiences and workplace situations

If you can design a course in which students get some practice in these areas, they will be well-prepared for the more challenging applications later in the semester—such as the formal technical report or instructions.

Chapter 4 features important and closely related applications of technical writing—recommendation, evaluation, and feasibility reports. In addition to those listed above, goals for these types of reports should be something like the following:

- Understanding why comparison is essential in these types of reports
- Understanding the rather fine distinctions between these types of reports
- Establishing priorities in case there is no clear “winner” based on the initial point-by-point conclusions
- Using headings to block off the comparative section, and each of its individual subsections
- Creating tables that summarize essential comparative data
- Using the “executive” organization approach in reports of this type
Study Units & Writing Assignments

When you plan your course schedule, assign chapters from Parts 2 and 3 of Power Tools concurrently with the Part 1 chapters that you use. Obviously, you can’t cover all of the Parts 2, 3, 4, and 5 chapters before having students write a simple comparison so here are some strategies:

- Make sure that students learn about audience analysis (Chapter 19) before this unit or at the beginning of this unit.
- Have students learn or review strategies for tables, graphs, and charts (Chapter 10) in this unit.
- Have students learn or review fragments, run-ons, and comma splices (Appendix C).
- Cover the information search (Chapter 20) in this unit; have students gather information from print, Internet, and other sources.
- Cover documentation (Chapter 21) in this unit. Ensure that students indicate the sources of their borrowed information properly.

The following pages provide different lesson plans for comparisons and recommendation reports. Just yank out the chapters you’ve already covered earlier in the semester:
<table>
<thead>
<tr>
<th><strong>Comparison Unit</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chapter 4</strong></td>
</tr>
<tr>
<td><strong>Chapter 19</strong></td>
</tr>
<tr>
<td><strong>Chapter 7</strong></td>
</tr>
<tr>
<td><strong>Appendix c</strong></td>
</tr>
<tr>
<td>———</td>
</tr>
</tbody>
</table>
### Teaching Ideas

Here are some suggestions for things to do in class to get students ready to write comparisons and recommendation reports:

*Give the chapter reading quiz.* Have students read the chapter and take the reading quiz—either in class or in the lab. Discussing the answers is a good way to get students thinking about the concepts and strategies in this chapter.

*Use the labs.* The labs for this chapter involve defining points of comparison, transitions used in comparisons, different types of conclusions in recommendation

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Task</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Read this chapter on comparisons and recommendation reports—all of it in order to get a complete picture.</td>
<td>Take the reading quiz. Do exercises 1, 2, 3, and 4 (in the following pages).</td>
</tr>
<tr>
<td>19</td>
<td>Make sure to have studied this chapter on audience analysis.</td>
<td>Take the reading quiz. Do as many of exercises 1 through 5 in chapter 19 as you have time for.</td>
</tr>
<tr>
<td>7</td>
<td>Read this chapter on the design and format of headings.</td>
<td>Take the reading quiz. Do labs 1, 2, and 3.</td>
</tr>
<tr>
<td>10</td>
<td>Read this chapter on tables, charts, and graphs.</td>
<td>Take the reading quiz. Do labs 1, 2, 3, and 4.</td>
</tr>
<tr>
<td>C</td>
<td>Read the part of this appendix on fragments, run-ons, and comma splices.</td>
<td>Take the reading quiz. Do exercises 1 and 2.</td>
</tr>
<tr>
<td>20</td>
<td>Read about how to find information in print, Internet, and other sources</td>
<td>Take the reading quiz. Do labs 1–7.</td>
</tr>
<tr>
<td>21</td>
<td>Read about how to document the sources of borrowed information.</td>
<td>Take the reading quiz. Do labs 1, 2, and 3.</td>
</tr>
<tr>
<td>15</td>
<td>Read about report format.</td>
<td>Take the reading quiz. Do labs 1, 2, and 3.</td>
</tr>
<tr>
<td>——</td>
<td>Do the recommendation-report formatting lab (in the following pages).</td>
<td>(This can be a lab or an in-class exercise.)</td>
</tr>
<tr>
<td>——</td>
<td>Write a recommendation report.</td>
<td>Do project 3 (in the following pages).</td>
</tr>
</tbody>
</table>
reports, constructing summary tables as well as formatting comparisons and recommendation reports. You can also do these labs in the regular classroom as well as a computer lab.

Identifying points of comparison. Spend some time with your class defining points of comparison. Caution students not to rely on overly general points such as “features.” Show students how those points of comparison that they identify would look in paragraphs of a writing project on the same topic.

Analysis of existing comparisons. One way to make students aware of the content, organization, format, and style issues related to comparisons is to take them on a careful tour of one or more such documents in class. You can use the examples in Chapter 4, showing students how:

- comparisons are organized by systematic discussion of points of comparison, one point at a time.
- transitions help readers understand how one item compares to another.
- headings mark off the discussion of the different comparative sections.
- comparisons meet the needs of a specific audience in a specific workplace situation.

Analysis of existing recommendation reports. Similarly, a good way to make students aware of the content, organization, format, and style used in recommendation reports is to take them on a careful tour of one or more such documents in class. Use the examples in Chapter 4, showing students how:

- recommendation reports are organized by systematic discussion of points of comparison, one point at a time.
- requirements and priorities are stated up front.
- transitions help readers understand how one item compares to another.
- headings mark off the discussion of the different parts of a recommendation report as well as the individual comparative sections.
- how individual conclusions are stated in the specific comparisons.
- secondary conclusions must be stated so that readers can see the logic leading to final conclusion.
- recommendation reports meet the needs of a specific audience in a specific workplace situation.

Comparison walk-through. With the class, “walk through” the phases of planning, and writing a simple comparison—or as much as possible in a classroom meeting. Use a computer projector so that students can see the simple comparison emerge before their very eyes. Start with some simple comparison, such as cats versus dogs; see what realistic situations the class can think of; or start with a workplace audience or situation—get students to imagine what comparisons they might require. Move on to identifying the points of comparison, determining the individual conclusions, and perhaps drafting the introduction and a paragraph on one of the comparative points.
Recommendation-report walk-through. Try the same group-composition idea with recommendation reports. In this case, try simple situations, such as which grocery store to use or which SUV to purchase; see what realistic situations the class can think of; or start with a workplace audience or situation and think of the recommendation reports they might require. With the class, identify points of comparison; requirements and priorities; individual conclusions; information for a summary table; and so on.
Technical-Writing Lab — Comparison

In this lab, you’ll get some practice planning and formatting comparisons and their main application, recommendation reports. All of the links in the following are available at:

www.io.com/~hcexres/power_tools/comparison/

Chapter 4 — Reading Quiz

Before this lab, make sure you’ve read Chapter 4 and made a score on the reading quiz for this chapter as required by your instructor. This reading quiz is available at the following web address and can be e-mailed directly to your instructor:

www.io.com/~hcexres/power_tools/comparison/comparison_quiz.html

Lab 1 — Identifying Points of Comparison

To get used to thinking about points of comparison as they are defined in Chapter 4, go to the following web address, and identify the points of comparison from the lists associated with each example topic:

www.io.com/~hcexres/power_tools/comparison/identify_comparison.html

Lab 2 — Transitions in Comparisons

Transitions are critical in comparisons, enabling readers to understand similarities and differences between the things being discussed and the magnitude of those similarities and differences. Go to the following web address, and identify comparison-related transitions:

www.io.com/~hcexres/power_tools/comparison/identify_transitions.html

Lab 3 — Identifying Conclusions

In recommendation reports, it’s essential to state not only the primary conclusions, but the secondary and final conclusions as well. To get some practice with this important aspect of recommendation reports, go to the following web address and identify, arrange, or state the types of conclusions:

www.io.com/~hcexres/power_tools/comparison/identify_conclusions.html

Lab 4 — Developing Summary Tables

In recommendation reports, summary tables give readers a different way of seeing the essential information. To get some practice with this important element of recommendation reports, go to the following web address and use the data there to create summary tables. (This lab assumes you’ve studied tables in Chapter10.)

www.io.com/~hcexres/power_tools/comparison/summary_tables.html
Technical-Writing Lab — Formatting Comparisons

In this lab, you use unformatted text to develop a well-designed comparison for print, online, or both — as required by your instructor. (This lab assumes that you’ve studied the chapters on headings, lists, and tables.)

Word-processing document

In this exercise, you add headings, lists, and tables to the unformatted text of a comparison:

1. Go to the following web address, copy the text at that address, and paste it into your preferred word-processing software:

   www.io.com/~hcexres/power_tools/comparison/comparison_formatA.html

2. Study the unformatted text carefully, rearrange the paragraphs as necessary, add headings, and reformat text as tables, numbered lists, and bulleted lists as necessary.

3. Go back to the web address mentioned above, and copy the graphics for the text you are working on. Insert those graphics where they belong in the text, and add labels, figure titles, and cross-references.

4. Put your name, Comparison Format A, and the date on this document, and print it out for your instructor.

Web-page document

For this second part, do the same things that you did in the preceding but for a web page. cause–effect explanation. To be ready for this project, you need to have studied Chapter 17 and have done at least one other web-page formatting project:

1. Using a simple text editor or web-page editor of your choice, create simple web page like the one shown in Chapter 17 entitled My First Web Page. Between the <TITLE> and </TITLE> tags and between the <H1> and </H1> tags, substitute Web Page Comparison.

2. Go to the following web address, copy the text at that address, and paste it into the web page you just started:

   www.io.com/~hcexres/power_tools/comparison/comparison_formatB.html

3. Study the unformatted text carefully, rearrange the paragraphs as necessary, add headings, and reformat text as tables, numbered lists, and bulleted lists as necessary.

4. Go back to the web address mentioned above, and copy the graphics for the text you are working on. Insert those graphics where they belong in the text, and add labels, figure titles, and cross-references.

5. Put your name, Comparison Format B, and the date on this document, and print it out for your instructor.
Technical-Writing Lab: Formatting Recommendation Reports

In this lab, you use unformatted text to develop a well-designed recommendation report for print, online, or both — as required by your instructor. (This lab assumes that you’ve studied the chapters on headings, lists, and tables.)

Word-processing document

In this exercise, you add headings, lists, and tables to the unformatted text of a recommendation report:

1. Go to the following web address, copy the text at that address, and paste it into your preferred word-processing software:
   www.io.com/~hcexres/power_tools/comparison/recomm_formatA.html

2. Study the unformatted text carefully, rearrange the paragraphs as necessary, add headings, and reformat text as tables, numbered lists, and bulleted lists as necessary.

3. Go back to web address mentioned above, and copy the graphics for the text you are working on. Insert those graphics where they belong in the text, and add labels, figure titles, and cross-references.

4. Put your name, Recommendation-Report Format A, and the date on this document, and print it out for your instructor.

Web-page document

For this second part, do the same things that you did in the preceding but for a web page. To be ready for this project, you need to have studied Chapter 17 and have done at least one other web-page formatting project:

1. Using a simple text editor or web-page editor of your choice, create a simple web page like the one shown in Chapter 17 entitled My First Web Page. Between the <TITLE> and </TITLE> tags and between the <H1> and </H1> tags, substitute Web Page Recommendation Report.

2. Go to the following web address, copy the text at that address, and paste it into the web page you just started:
   www.io.com/~hcexres/power_tools/comparison/recomm_formatB.html

3. Study the unformatted text carefully, rearrange the paragraphs as necessary, add headings, and reformat text as tables, numbered lists, and bulleted lists as necessary.

4. Go back to web address, and copy the graphics. Insert those graphics where they belong in the text, and add labels, figure titles, and cross-references.

5. Put your name, Recommendation-Report Format B, and the date on this document, and print it out for your instructor.
**Project 1 — Brief Comparison**

Using the discussion and examples in Chapter 4, plan and write a short comparison of about 8 to 12 sentences. Here are the essential requirements:

1. Describe the *audience* and that audience’s need for the comparison (including the workplace situation in which the comparison is needed). Attach this audience information to the end of this document.

2. Toward the beginning of this comparison, identify or define the *items to be compared* and list the *points of comparison* you’ll use.

3. Use the *point-by-point method of comparison*—not the whole-to-whole method.

4. Use *strong transitions* to help readers understand the essential similarities and differences.

5. Ensure that your comparison meets your targeted *audience’s needs* and *comprehension level* (for example, by defining potentially unfamiliar terms).

6. As with all writing projects in this course, use the *standards* of good writing, including punctuation, grammar, usage, and spelling.
Project 2 — Comparison

Using the discussion and examples in Chapter 4, plan and write a comparison of 3 to 5 paragraphs. Here are the essential requirements:

1. Describe the audience and that audience’s need for the comparison (including the workplace situation in which the comparison is needed). Attach this audience information to the end of this document.

2. In the introduction to this comparison, identify or define the items to be compared and list the points of comparison you’ll use.

3. Use the point-by-point method of comparison—not the whole-to-whole method. Try to use one paragraph per point of comparison.

4. Use strong transitions to signal help readers understand the essential similarities and differences.

5. If you’ve studied Chapter 7, use headings to identify the main parts of this comparison.

6. Ensure that your comparison meets your targeted audience’s needs and comprehension level (for example, by defining potentially unfamiliar terms).

7. As with all writing projects in this course, use the standards of good writing, including punctuation, grammar, usage, and spelling.
Project 3 — Recommendation Report

Using the discussion and examples in Chapter 4, plan and write a recommendation report based on the following requirements (and as modified by your instructor):

1. Describe the audience and that audience’s need for the recommendation report (including the workplace situation in which it is needed). Attach this audience information to the end of this report.

2. Find a situation in which a recommendation is needed: for example, a small organization considering the purchase of office equipment.

3. Compare two or more products, services, people, or organizations in order to recommend one for a specific need. List these items to be compared toward the beginning of the report.

4. Toward the beginning of this report, state the points of comparison you’ll be using as well as your priorities for those points of comparison. State exact or measurable values for these comparative points and priorities.

5. Toward the beginning of the report, provide some background on the need for the recommendation, the technology used in the items compared, or other such—but only if necessary.

6. Use the point-by-point method of comparison—not the whole-to-whole method. Try to use one or more paragraphs per point of comparison. State a conclusion in each of these comparative sections (even if it seems obvious).

7. If you’ve studied Chapter 7, use headings to identify the main parts of this report.

8. Use numbered and bulleted lists whenever they increase the readability of information in this report.

9. Use tables, charts, and graphs as necessary to present your findings.

10. Include a summary table, summarizing the key comparative information.

11. Include a list of conclusions in this report. In it, list the primary, secondary, and final conclusions.

12. Use a standard documentation style to indicate the sources from which you borrow information and graphics.

13. Ensure that this recommendation report meets your targeted audience’s needs and comprehension level (for example, by defining potentially unfamiliar terms).

14. As with all writing projects in this course, use the standards of good writing, including punctuation, grammar, usage, and spelling.
Chapter 4 — Reading Quiz

Read Chapter 4 of *Power Tools for Technical Communication* and answer each of the following. (A multiple-choice version is available at the website for this book.)

1. Describe the *point-by-point approach* to organizing and writing comparisons, and provide an example.

2. Describe the *whole-to-whole approach* to organizing and writing comparisons, and provide an example.

3. Explain which approach—the whole-to-whole approach or the point-by-point approach—Chapter 4 recommends for writing comparisons and why.

4. Transitions are critical in discussing comparisons. Provide some examples of sentences with transition words and phrases that you would expect to see in comparisons.

5. Explain the difference between a *feasibility report* and a *recommendation report*.

6. Explain the difference between a *recommendation report* and an *evaluation report*.

7. Explain the difference between a *primary conclusion* and *secondary conclusion*.

8. Explain the difference between a *conclusion* and a *recommendation*.

9. Explain what a summary table is and how it functions in recommendation, evaluation, and feasibility reports.

10. Think of a comparison and then make topic list based on a point-by-point comparison.
Chapter 5. Definition and Classification: Background Reports

This chapter in PowerTools introduces students to basic strategies for writing definitions and classifications and then applies those strategies to writing background reports where these two infrastructures often play an important role.

Writing definitions and classifications is an important practice field for technical writing courses. Knowing different ways to define unfamiliar terms is essential for anyone writing about technical subjects. Students need “practice” writing projects involving description, process, cause–effect explanation, comparison, definition, and classification to learn the style of technical writing at the sentence and paragraph level. Specifically, in the case of definition and classification:

- Identifying terms for which readers may need definitions
- Writing short definitions, included within other sentences
- Writing formal sentence definitions, complete with term, category, and differentiation
- Constructing an extended definition and selecting from the sources of definition to construct that definition
- Using common organizational approaches to arrange the parts of an extended definition
- Most importantly, writing definitions that work for specific audiences and workplace situations

If you can design a course in which students get some practice in these areas, they will be well-prepared for the more challenging applications later in the semester—such as the formal technical report or instructions.

Chapter 5 features an important application of technical writing—the technical background report. In additional to those listed above, goals for this type of report should be something like the following:

- Including the right information at the right level for the specific audience of the background report
- Using the infrastructures (description, process, causes, effects, comparison, definition, classification) to plan the content of a technical background report
- Choosing the appropriate format for this type of report: memo, business letter, or formal report.
- Finding information for the technical background report and documenting it properly
- Using headings and lists in this type of report
- Incorporating tables, graphs, charts, and illustrations in a technical background report.
Study Units & Writing Assignments

When you plan your course schedule, assign chapters from Parts 2 and 3 of *Power Tools* concurrently with the Part 1 chapters that you use. Obviously, you can’t cover all of the Parts 2, 3, 4, and 5 chapters before having students write a simple definition so here are some strategies:

- Make sure that students learn about audience analysis (Chapter 19) before this unit or at the beginning of this unit.
- Have students learn about the format of formal reports (Chapter 15).
- Have students read about and get some practice reviewing and revising technical texts (Chapter 18).
- Cover headings (Chapter 7) in this unit, especially if this unit comes *before* process and instructions (Chapter 2).
- Cover the information search (Chapter 20) in this unit; have students gather information print, Internet, and other sources.
- Cover documentation (Chapter 21) in this unit. Ensure that students indicate the sources of their borrowed information properly.

The following pages provide different lesson plans for extended definitions and technical background reports. Just yank out the chapters you’ve already covered earlier in the semester:
### Extended Definition Unit

| Chapter 5 | Read this chapter on extended definition and technical background reports—all of it in order to get a complete picture. | Take the reading quiz.  
Do exercises 1, 2, and 3 (in the following pages). |
|-----------|-----------------------------------------------------------------------------------------------------------------|--------------------------------------------------|
| Chapter 19| Read this chapter on audience analysis. | Take the reading quiz.  
Do exercises 1 through 5 in chapter 19 as you have time for. |
| Chapter 7 | Read this chapter on the design and format of headings. | Take the reading quiz.  
Do labs 1, 2, and 3. |
| **Power Tools** website | Read about sentence-style problems at [www.io.com/~hcexres/power_tools/sentence_style.html](http://www.io.com/~hcexres/power_tools/sentence_style.html) | Do the available exercises. |
| **Power Tools** website | Read about organization at [www.io.com/~hcexres/power_tools/organization.html](http://www.io.com/~hcexres/power_tools/organization.html) | Do the available exercises. |
| Chapter 18 | Read this chapter on reviewing and revising strategies. | Do labs 1, 2, and 3. |
| ——— | Do the definition-formatting lab (in the following pages). | (This can be a lab or an in-class exercise.) |
| ——— | Less-experienced writers: write a single-paragraph extended definition or classification (without headings).  
More-experienced writers: write a multiple-paragraph extended definition or classification (with headings). | Do project 1 (in the following pages).  
Do project 2 (in the following pages). |
## Technical Background Report Unit

| Chapter 5 | Read this chapter on extended definition and technical background reports—all of it in order to get a complete picture. | Take the reading quiz.  
Do exercises 1, 2, 3, and 4 (in the following pages). |
| Chapter 19 | Read this chapter on audience analysis. | Take the reading quiz.  
Do as many of exercises 1 through 5 in chapter 19 as you have time for. |
| Chapter 20 | Read about how to find information in print, Internet, and other sources | Take the reading quiz.  
Do labs 1–7. |
| Chapter 21 | Read about how to document the sources of borrowed information. | Take the reading quiz.  
Do labs 1, 2, and 3. |
| Chapter 7 | Read this chapter on the design and format of headings. | Take the reading quiz.  
Do labs 1, 2, and 3. |
| Chapter 8 | Read this chapter on numbered, bulleted, and other kinds of lists. | Take the reading quiz.  
Do labs 1, 2, and 3. |
| Chapter 10 | Read this chapter on tables, charts, and graphs. | Take the reading quiz.  
Do labs 1, 2, 3, and 4. |
| Chapter 15 | Read about report format. | Take the reading quiz.  
Do labs 1, 2, and 3. |
| **Power Tools website** | Read about organization at [www.io.com/~hcexres/power_tools/organization.html](http://www.io.com/~hcexres/power_tools/organization.html) | Do the available exercises. |
| Chapter 18 | Read this chapter on reviewing and revising strategies. | Do labs 1, 2, and 3. |
| —— | Do the background-report formatting lab (in the following pages). | (This can be a lab or an in-class exercise.) |
| —— | Write a technical background report. | Do project 3 (in the following pages). |
Teaching Ideas

Here are some suggestions for things to do in class to get students ready to write extended definitions and technical background reports:

*Give the chapter reading quiz.* Have students read the chapter and take the reading quiz—either in class or in the lab. Discussing the answers is a good way to get students thinking about the concepts and strategies in this chapter.

*Use the labs.* The labs for this chapter involve writing short and formal-sentence definitions, selecting sources of definition, defining categories for classifications, developing scenarios for background reports as well as formatting extended definitions and background reports. You can also do these labs in the regular classroom as well as a computer lab.

*Finding terms for extended definition.* One of the hardest things for students is to think of words that need extended definition. Show them how a simple glossary-style definition of a term is not enough for certain complex words that carry a lot of baggage.

*Analyzing existing extended definitions.* One way to make students aware of the content, organization, format, and style issues related to extended definitions is to take them on a careful tour of one or more such documents in class. You can use the examples in Chapter 5, showing students how extended definitions:
  - introduce the extended discussion of a term with a formal sentence definition.
  - use other types of writing such as description, process, causes, effects, and comparison to define terms.
  - use short definitions to define additional terms.
  - use headings mark off the different parts of an extended definition.
  - meet the needs of a specific audience in a specific workplace situation.

You can find addition examples of extended definitions at [www.io.com/~hcexres/power_tools/examples](http://www.io.com/~hcexres/power_tools/examples).

*Inventing scenarios of background reports.* A problem with background reports in technical-writing courses is that students often lack a situation and audience for which to write this type of report. Lacking this context, they choose monster topics with only vague textbookish approaches. A useful exercise for students in this predicament is to pose a broad topic and have them invent an audience and situation and narrow that topic accordingly.

*Analyzing an existing technical background report.* A good way to make students aware of the content, organization, format, and style issues related to technical background reports is to take them on a careful tour of one or more such reports in class. This activity will also make them aware of the components and design of a
formal report—or whichever report format you require for this project. You can use the examples in Chapter 5, showing students how:

- technical background reports tend to focus on topics and use the strategies of extended definition to present content.
- components of a formal report are used in a technical background report.
- sources of borrowed information are cited in the report.
- one or more summaries (abstracts) present key aspects of the report in condensed form.
- headings mark off the discussion of the different aspects of the topic.
- tables, graphs, charts, and graphics are used to present information more directly or efficiently (or to re-present information in a nontextual way).
- technical background reports meet the needs of a specific audience in a specific workplace situation.

You can find additional examples of technical background reports at www.io.com/~hcexres/power_tools/examples.

Extended definition walk-through. An interesting thing to do with the class is to “walk through” the phases of developing, planning, and writing a simple extended definition—or as much of it as possible in a classroom meeting. Use a computer projector so that students can see the simple extended definition emerge before their very eyes. Start with some obvious term; see what realistic situations the class can think of; or start with a workplace audience or situation—get students to imagine what extended definitions might be required. Move on to sketching the formal sentence definition, identifying the sources of definition, and perhaps drafting the introduction and a paragraph for one of the main sections.

Technical background report walk-through. Another useful thing to do with the class is to “walk through” the phases of developing, planning, and writing a simple technical background report—or as much of it as possible in a classroom meeting. Use a computer projector so that students can see the report emerge before their very eyes. Start with some absurdly simple topic, and have students brainstorm likely audiences and situations that would call for reports on that topic. Or see what realistic situations the class can think of. Or start with a workplace audience or situation: get students to imagine what technical background reports they might require. Move on to identifying the parts of the report, sketching an outline, listing the formal components (title page, table of contents, etc.), and perhaps drafting the introduction and a paragraph for one of the main sections.
Technical-Writing Lab — Definition and Classification

In this lab, you get some practice planning and formatting definitions and one of their main applications, the technical background report. All of the links in the following are available at:

www.io.com/~hcexres/power_tools/definition/

Chapter 5 — Reading Quiz

Before this lab, make sure you’ve read Chapter 5, and made a score on the reading quiz for this chapter as required by your instructor. This reading quiz is available at the following web address and can be e-mailed directly to your instructor:
www.io.com/~hcexres/power_tools/definition/definition_quiz.html

Lab 1 — Constructing Short and Formal Sentence Definitions

Get some practice incorporating short definitions and sentence-length definitions in your technical writing. Go to the following web address, and use the text there to create short definitions contained in other sentences and to create formal sentence definitions:
www.io.com/~hcexres/power_tools/definition/write_definition.html

Lab 2 — Identifying and Choosing Sources of Definition

The sources of definition help you plan extended definitions and think of good explanatory information to include in them. Go to the following web address, and practice identifying the sources of definition and using them to construct extended definitions:
www.io.com/~hcexres/power_tools/definition/sources_definition.html

Lab 3 — Defining Categories

Discussing categories of a topic is a good organized way to develop a background report. But when you divide a topic into categories, use just one basis of classification. Go to the following web address, and practice dividing topics into categories and identifying the bases of classification:
www.io.com/~hcexres/power_tools/definition/classification.html

Lab 4 — Developing Scenarios for Technical Background Reports

In technical writing courses, it’s sometimes difficult to find real-life situations needing a technical background report. Sometimes you have to invent situations. Go to the following web address, and get some practice inventing scenarios—audiences and situations—for report topics and types of reports:
www.io.com/~hcexres/power_tools/definition/report_scenarios.html
Technical-Writing Lab — Formatting Extended Definitions

In this lab, you use unformatted text to develop an extended definition for print, online, or both — as required by your instructor. (This lab assumes that you’ve studied the chapters on headings, lists, tables, and graphics.)

Word-processing document

In this exercise, you add headings, lists, and illustrations to the unformatted text of an extended definition:

1. Go to the following web address, copy the text at that address, and paste it into your preferred word-processing software:
   www.io.com/~hcexres/power_tools/definition/def_formatA.html

2. Study the unformatted text carefully, rearrange the paragraphs as necessary, add headings, and reformat text as tables, numbered lists, and bulleted lists as necessary.

3. Go back to web address mentioned above, and copy the graphics for the text you are working on. Insert those graphics where they belong in the text, and add labels, figure titles, and cross-references.

4. Put your name, Extended Definition Format A, and the date on this document, and print it out for your instructor.

Web-page document

For this second part, do the same things that you did in the preceding but for a set of web pages. To be ready for this project, you need to have studied Chapter 17 and have done at least one other web-page formatting project:

1. Go to the following web address, copy the text at that address, and paste it into the web page you just started:
   www.io.com/~hcexres/power_tools/definition/def_formatB.html

2. Study the unformatted text carefully, rearrange the paragraphs as necessary, add headings, and reformat text as tables, numbered lists, and bulleted lists as necessary.

3. Go back to web address mentioned above, and copy the graphics for the text you are working on. Insert those graphics where they belong in the text, and add labels, figure titles, and cross-references.

4. Put your name, Extended Definition Format B, and the date on this document, and print it out for your instructor.
Technical-Writing Lab: Formatting Technical Background Reports

In this lab, you use unformatted text to develop a formal technical background report for print, online, or both — as required by your instructor. (This lab assumes that you’ve studied the chapters on headings, lists, tables, and graphics.)

Word-processing document

1. Go to the following web address, copy the text at that address, and paste it into your preferred word-processing software:
   www.io.com/~hcexres/power_tools/background/report_formatA.html

2. Format each of the components of a formal technical background report according to the format shown in Chapter 15 or as required by your instructor.

3. Study the unformatted text carefully, add headings, and reformat text as tables, numbered lists, and bulleted lists as necessary.

4. Go back to the web address mentioned above, and copy the graphics for the text you are working on. Insert those graphics where they belong in the text, and add labels, figure titles, and cross-references.

5. Put your name, Background Report Format A, and the date on this document, and print it out for your instructor.

Web-page document

For this second part, do the same things that you did in the preceding but for a set of web pages. To be ready for this project, you need to have studied Chapter 17 and have done at least one other web-page formatting project:

1. Go to the following web address, copy the text at that address, and paste it into web pages:
   www.io.com/~hcexres/power_tools/background/report_formatB.html

2. Include the standard components of a formal technical background report as discussed in Chapter 15 or as required by your instructor. However, use the hypertext strategies presented in Chapter 17 to make the report usable online.

3. Study the unformatted text carefully, add headings, and reformat text as tables, numbered lists, and bulleted lists as necessary.

4. Go back to the web address mentioned above, and copy the graphics for the text you are working on. Insert those graphics where they belong in the text, and add labels, figure titles, and cross-references.

5. Include your name in some identifiable location in this hypertext version of the report, and let your instructor know where to find the report.
Project 1 — Extended Definition

Using the discussion and examples in Chapter 5, plan and write an extended definition of 8 to 12 sentences. Here are the essential requirements:

1. Describe the *audience* and that audience’s need for the extended definition (including the workplace situation in which the definition is needed). Attach this audience information to the end of this document.

2. Toward the beginning of this extended definition, include a *formal sentence definition* of the word or phrase you are writing about.

3. Use the *sources of definition* to plan and write a thorough discussion of the term you are defining: for example, description, analogies, causes, and effects.

4. Use good *organization* and strong *transitions* in this extended definition.

5. Ensure that your extended definition meets your targeted *audience’s needs* and *comprehension level* (for example, by defining potentially unfamiliar terms).

6. As with all writing projects in this course, use the *standards* of good writing, including punctuation, grammar, usage, and spelling.
Project 2 — Extended Definition

Using the discussion and examples in Chapter 5, plan and write an extended definition of 3 to 5 paragraphs. Here are the essential requirements:

1. Describe the audience and that audience’s need for the extended definition (including the workplace situation in which the extended definition is needed). Attach this audience information to the end of this document.

2. In the introduction to this extended definition, include a *formal sentence definition* of the word or phrase you are writing about.

3. Use the *sources of definition* to plan and write a thorough discussion of the term you are defining.

4. Use good *organization* and strong *transitions* in this extended definition.

5. If you’ve studied Chapter 7, use *headings* to identify the main parts of this extended definition.

6. Use *numbered and bulleted lists* whenever they can increase the readability of this extended definition.

7. Use *tables, charts, and graphs* as necessary to present information when possible.

8. Ensure that your extended definition meets your targeted audience’s needs and *comprehension level* (for example, by defining potentially unfamiliar terms).

9. As with all writing projects in this course, use the *standards* of good writing, including punctuation, grammar, usage, and spelling.
Project 3 — Technical Background Report

Using the discussion and examples in Chapter 5, plan and write a technical background report based on the following requirements (and as modified by your instructor):

1. Describe the audience and that audience’s need for the technical background report (including the workplace situation in which it is needed). Attach this audience information to the end of this report.

2. Find a situation in which a technical background report is needed.

3. Use headings to identify the main parts of this report.

4. Use numbered and bulleted lists whenever they can increase the readability of information in this report.

5. Use tables, charts, and graphs as necessary to present information when possible.

6. Include all the front-matter components as required by your instructor (or as shown in Chapter 15): transmittal letter, title page, table of contents, figure list, abstract.

7. Include a separate introduction that indicates the topic, purpose, and audience of the report, provides only enough background to enable readers to understand the rest of the report, and includes an overview of the topics to be covered.

8. Include a descriptive abstract on the title page and an executive summary or informative abstract just before the introduction.

9. Include all the back-matter components as required by your instructor (or as shown in Chapter 15): appendix divider page, appendixes (only as needed), and information-sources list.

10. Use a standard documentation style to indicate the sources from which you borrow information and graphics.

11. Ensure that this technical background report meets your targeted audience’s needs and comprehension level (for example, by defining potentially unfamiliar terms).

12. As with all writing projects in this course, use the standards of good writing, including punctuation, grammar, usage, and spelling.
Chapter 5 — Reading Quiz

Read Chapter 5 of *Power Tools for Technical Communication*, and answer each of the following. (A multiple-choice version is available at the website for this book.)

1. Explain how the term *definition* is used in this chapter.

2. Explain the difference between the two types of *classification* discussed in this chapter.

3. Write an example of a *formal sentence definition*.

4. Define the *elements* of a formal sentence definition, and label the formal sentence definition you just wrote accordingly.

5. Explain what Chapter 5 recommends for planning the content of an *extended definition*.

6. Explain what a *basis of classification* is and how it functions in a discussion of categories.

7. Write a topic, then list its categories, and then describe the basis of classification you used.

8. According to Chapter 5, how should you go about explaining which category an item belongs in?

9. Define the *background report* as it is presented in Chapter 5.

10. Explain the role that definition and classification play in background reports.
This chapter in *Power Tools* introduces students to basic strategies for writing persuasively and then applies these strategies to writing proposals and progress reports in which persuasion plays an important role. These strategies also apply to some of the types of business communications in Chapter 13 and to the resume and application letter in Chapter 14.

Writing persuasively is not necessarily off-limits to technical writing courses. Although replaying the typical persuasive essay of freshman composition courses is not a good idea, it’s useful for students to see how persuasion gets involved in technical writing. Proposals, progress reports, job-application letters, resumes, and other such documents have an essentially persuasive purpose. Brief technically oriented practice persuasive documents are not a common assignment for technical writing courses—the way that brief “practice” descriptions, process explanations, and extended definitions are. However, if your semester plans leave room for such a writing project, it’s a useful way to solidify the connection in students’ minds with their past studies in rhetoric and composition.

In a unit on persuasion in a technical writing course, consider these goals:

- Identify logical appeals useful in a persuasive effort, and consider how effective using such appeals might be.
- Identify emotional appeals that could be used in a persuasive effort, and consider how effective and how ethical using such appeals might be.
- Identify personal appeals useful in a persuasive effort, and consider how effective and how ethical using such appeals might be.
- Identify counterarguments that must be addressed in a persuasive effort, and use rebuttals and concessions to address them.
- Most importantly, writing persuasively for specific audiences and workplace situations

This chapter features important applications of technical writing—proposals and progress reports. In addition to those listed above, goals for these types of documents should be something like the following:

- Understand just what a proposal is and what role it plays in the professional context in which it is written
- Know the common parts of a proposal and their logic.
- Understand how both logical and personal appeals are necessary in proposals.
- Use headings, lists, and tables to increase the readability of proposals.
- Know which format to use for proposals—memo, letter, or report-like document.
• Understand just what a progress report is and what role it plays in the professional context in which it is written.
• Understand the common parts of a progress report and their logic.
• Understand how both logical and personal appeals are necessary in progress reports.
• Use headings, lists, and tables to increase the readability of progress reports.
• Know which format to use for progress reports—memo, letter, or report-like document.

Study Units & Writing Assignments

When you plan your course schedule, assign chapters from Parts 2 and 3 of Power Tools concurrently with the Part 1 chapters that you use. Obviously, you can’t cover all of the Parts 2, 3, 4, and 5 chapters before having students write a simple persuasion so here are some strategies:

• Make sure that students learn about audience analysis (Chapter 19) before this unit or at the beginning of this unit.
• Have students learn or review strategies for tables, graphs, and charts (Chapter 10) in this unit.
• Have students learn or review fragments, run-ons, and comma splices (Appendix C).
• Cover the information search (Chapter 20) in this unit; have students gather information print, Internet, and other sources.
• Cover documentation (Chapter 21) in this unit. Ensure that students indicate the sources of their borrowed information properly.

The following pages provide different lesson plans for persuasions, proposals, and progress reports. Just yank out the chapters you’ve already covered earlier in the semester:
<table>
<thead>
<tr>
<th>Persuasion Unit</th>
</tr>
</thead>
</table>
| **Chapter 6**   | Read this chapter on persuasion, proposals, and progress reports—all of it in order to get a complete picture. | Take the reading quiz.  
Do labs 1 and 2 (in the following pages). |
| **Chapter 19**  | Read this chapter on audience analysis. | Take the reading quiz.  
Do as many of exercises 1 through 5 in chapter 19 as you have time for. |
| **Appendix C**  | Read the part of this appendix on fragments, run-ons, and comma splices. | Take the reading quiz.  
Do exercises 1 and 2. |
| **——**          | *Less-experienced writers:* write a single-paragraph persuasion (without headings).  
*More-experienced writers:* write a multiple-paragraph persuasion (with headings). | Do project 1 (in the following pages).  
Do project 2 (in the following pages). |
**Proposal Unit**

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Read this chapter on persuasion, proposals, and progress reports—all of it in order to get a complete picture.</th>
<th>Take the reading quiz. Do exercises 1, 2, 3, and 4 (in the following pages).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter 19</td>
<td>Make sure to have studied this chapter on audience analysis.</td>
<td>Take the reading quiz. Do as many of exercises 1 through 5 in chapter 19 as you have time for.</td>
</tr>
<tr>
<td><em>Power Tools website</em></td>
<td>Read about transitions at <a href="http://www.io.com/~hcexres/power_tools/outlining.html">www.io.com/~hcexres/power_tools/outlining.html</a></td>
<td>Do the available exercises.</td>
</tr>
<tr>
<td>Chapter 20</td>
<td>Read about how to find information in print, Internet, and other sources</td>
<td>Take the reading quiz. Do labs 1–7.</td>
</tr>
<tr>
<td>Chapter 21</td>
<td>Read about how to document the sources of borrowed information.</td>
<td>Take the reading quiz. Do labs 1, 2, and 3.</td>
</tr>
<tr>
<td>Chapter 13</td>
<td>Read about business correspondence: letters, memos, e-mail</td>
<td>Do labs 1–5.</td>
</tr>
<tr>
<td>Chapter 15</td>
<td>Read about report format.</td>
<td>Take the reading quiz. Do labs 1, 2, and 3.</td>
</tr>
<tr>
<td>———</td>
<td>Do the proposal-formatting lab (in the following pages).</td>
<td>(This can be a lab or an in-class exercise.)</td>
</tr>
<tr>
<td>———</td>
<td>Write a proposal.</td>
<td>Do project 3 (in the following pages).</td>
</tr>
</tbody>
</table>
Teaching Ideas

Here are some suggestions for things to do in class to get students ready to write persuasions, proposals, and progress reports:

*Give the chapter reading quiz.* Have students read the chapter and take the reading quiz—either in class or in the lab. Discussing the answers is a good way to get students thinking about the concepts and strategies in this chapter.

*Use the labs.* The labs for this chapter involve identifying appeals and other elements of persuasion as well as formatting proposals and progress reports. You can also do these labs in the regular classroom as well as a computer lab.

*Analyzing existing persuasions.* One way to make students aware of the content, organization, format, and style issues related to persuasions is to take them on a careful tour of one or more such documents in class. You can use the examples in Chapter 6, showing students how:

- logical, emotional, and personal appeals are used in technically oriented persuasion.
- individual logical appeals are included.
- counterarguments can be addressed in persuasions as well as how concessions and rebuttals can be used in relation to those counterarguments.

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<td>- individual logical appeals are included.</td>
</tr>
<tr>
<td>- counterarguments can be addressed in persuasions as well as how concessions and rebuttals can be used in relation to those counterarguments.</td>
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</tbody>
</table>
You can find addition examples of persuasion at www.io.com/~hcexres/power_tools/examples.

Analyzing an existing proposal. One way to make students aware of the content, organization, format, and style issues related to proposals is to take them on a careful tour of one or more such documents in class. You can use the examples in Chapter 6, showing students how proposals:

- address a problem or potential for improvement.
- use the format of a business letter, memorandum, or formal report depending on the situation and the audience.
- include sections to help readers to accept the proposal: discussion of a problem or potential for improvement; a description of the proposed project; arguments for the project in terms of its benefits and feasibility; details about the proposed project such as methodology, procedures, schedule, and costs; and personal appeals such as qualification and references.
- use headings to mark off the discussion of the different aspects of the topic.
- use tables, graphs, charts, and graphics to present information more directly or efficiently (or to re-present information in a nontextual way).

You can find addition examples of proposals at www.io.com/~hcexres/power_tools/examples.

Persuasion walk-through. An interesting thing to do with the class is to “walk through” the phases of developing, planning, and writing a simple technically oriented persuasion—or as much of it as possible in a classroom meeting. Use a computer projector so that students can see the persuasion emerge before their very eyes. Start with some obvious issue; see what realistic situations the class can think of; or start with a workplace audience or situation—get students to imagine what persuasive documents they might require. Identify potentially effective logical, emotional, and personal appeals; consider the ethics of the emotional and personal appeals; identify counterarguments; plan rebuttals and concessions in relation to those counterarguments; and perhaps draft the introduction and a paragraph for one of the logical appeals.

Proposal walk-through. Similarly, you can walk through the phases of developing, planning, and writing a simple proposal—or as much of it as possible in a classroom meeting. Use a computer projector so that students can see the proposal emerge before their very eyes. Start with a simple topic, and have students brainstorm likely audiences and situations that would call for a proposal on that topic. Or see what realistic situations the class can think of. Or start with a workplace audience or situation: get students to imagine what proposals they might require. Identify the parts of the proposal, sketch an outline, and perhaps draft the introduction and a paragraph for one of the main sections.
Progress report walk-through. You can also “walk through” the phases of developing, planning, and writing a simple progress report—or as much of it as possible in a classroom meeting. Use a computer projector so that students can see the report emerge before their very eyes. Start with some simple project, and have students imagine the details of a progress report for that project. Identify details for work completed, work in progress, and work planned; the outline; the overall status; and perhaps draft the introduction and a paragraph for one of the main sections.
Technical-Writing Lab — Persuasion

In this lab, you’ll get some practice planning and formatting persuasions and some of their main applications—proposals and progress reports. All of the links in the following are available at:

www.io.com/~hcexres/power_tools/persuasion/

Chapter 6 — Reading Quiz

Before this lab, make sure you’ve read Chapter 6 and made a score on the reading quiz for this chapter as required by your instructor. This reading quiz is available at the following web address and can be e-mailed directly to your instructor:

www.io.com/~hcexres/power_tools/persuasion/persuasion_quiz.html

Lab 1 — Identifying Appeals

Although logical appeals are the only “legitimate” argumentative strategy, emotional and personal appeals creep into writing in subtle ways. Using the excerpts at the following web address, get some practice identifying logical, emotional, and personal appeals:

www.io.com/~hcexres/power_tools/persuasion/identify_appeals.html

Lab 2 — Identifying Counterarguments, Rebuttals, Concessions

A good strategy for strengthening persuasive efforts is to consider counterarguments and to address them with rebuttals and concessions. Using the excerpts at the following web address, get some practice identifying counterarguments, rebuttals, and concessions:

www.io.com/~hcexres/power_tools/persuasion/identify_strategies.html

Lab 3 — Developing Scenarios for Proposals

In technical writing courses, it’s sometimes difficult to find real-life situations that can be addressed with a proposal. Sometimes you have to invent situations. Go to the following web address, and get some practice inventing scenarios—audiences and situations—for proposals:

www.io.com/~hcexres/power_tools/background/proposal_scenarios.html
Technical-Writing Lab — Formatting Proposals

In this lab, you use unformatted text to develop a proposal for print, online, or both — as required by your instructor. (This lab assumes that you’ve studied the chapters on headings, lists, tables, and graphics.)

Word-processing document

In this exercise, you add headings, lists, and illustrations to the unformatted text of a proposal:

1. Go to the following web address, copy the text at that address, and paste it into your preferred word-processing software:
   www.io.com/~hcexres/power_tools/persuasion/proposal_formatA.html

2. Study the unformatted text carefully, rearrange the paragraphs as necessary, add headings, and reformat text as tables, numbered lists, and bulleted lists as necessary.

3. Go back to the web address mentioned above, and copy the graphics for the text you are working on. Insert those graphics where they belong in the text, and add labels, figure titles, and cross-references.

4. Put your name, Proposal Format A, and the date on this document, and print it out for your instructor.

Web-page document

For this second part, do the same things that you did in the preceding but for a web page. To be ready for this project, you need to have studied Chapter 17 and have done at least one other web-page formatting project:

1. Using a simple text editor or web-page editor of your choice, create a simple web page like the one shown in Chapter 17 entitled My First Web Page. Between the <TITLE> and </TITLE> tags and between the <H1> and </H1> tags, substitute Web Page Proposal:
   www.io.com/~hcexres/power_tools/persuasion/proposal_formatB.html

2. Copy the text at that address, and paste it into the web page you just started.

3. Study the unformatted text carefully, rearrange the paragraphs as necessary, add headings, and reformat text as tables, numbered lists, and bulleted lists as necessary.

4. Go back to web address mentioned above, and copy the graphics for the text you are working on. Insert those graphics where they belong in the text, and add labels, figure titles, and cross-references.

5. Put your name, Proposal Format B, and the date on this document, and print it out for your instructor.
Technical-Writing Lab — Formatting Progress Reports

In this lab, you use unformatted text to develop a progress report for print, online, or both — as required by your instructor. (This lab assumes that you’ve studied the chapters on headings, lists, tables, and graphics.)

Word-processing document

In this lab, you add headings, lists, and illustrations to the unformatted text of a progress report:

1. Go to the following web address, copy the text at that address, and paste it into your preferred word-processing software:
   
   www.io.com/~hcexres/power_tools/persuasion/progrep_formatA.html

2. Study the unformatted text carefully, rearrange the paragraphs as necessary, add headings, and reformat text as tables, numbered lists, and bulleted lists as necessary.

3. Go back to the web address mentioned above, and copy the graphics for the text you are working on. Insert those graphics where they belong in the text, and add labels, figure titles, and cross-references.

4. Put your name, Progress Report Format A, and the date on this document, and print it out for your instructor.

Web-page document

For this second part, do the same things that you did in the preceding but for a web page. To be ready for this project, you need to have studied Chapter 17 and have done at least one other web-page formatting project:

1. Go to the following web address, copy the text at that address, and paste it into your preferred word-processing software:
   
   www.io.com/~hcexres/power_tools/persuasion/progrep_formatB.html

2. Using a simple text editor or web-page editor of your choice, create a simple web page like the one shown in Chapter 17 entitled My First Web Page. Between the <TITLE> and </TITLE> tags and between the <H1> and </H1> tags, substitute Web Page Progress Report.

3. Study the unformatted text carefully, rearrange the paragraphs as necessary, add headings, and reformat text as tables, numbered lists, and bulleted lists as necessary.

4. Go back to the web address mentioned above, and copy the graphics for the text you are working on. Insert those graphics where they belong in the text, and add labels, figure titles, and cross-references.

5. Put your name, Progress Report Format B, and the date on this document, and print it out for your instructor.
Project 1 — Brief Persuasive Document

Using the discussion and examples in Chapter 6, plan and write a persuasive document of 8 to 12 sentences. Here are the essential requirements:

1. Describe the audience and that audience’s need for the persuasion (including the workplace situation in which persuasion is needed). Attach this audience information to the end of this document.

2. Toward the beginning of this persuasion, either state your main argumentative point or use a placeholder statement. Toward the end of this persuasion, repeat or state your main argumentative point.

3. Use strong logical appeals to support your main argumentative point.

4. Use rebuttals and concessions to address counterarguments.

5. Use personal and emotional appeals sensibly and ethically.

6. Ensure that your persuasion meets your targeted audience’s needs and comprehension level (for example, by defining potentially unfamiliar terms).

7. As with all writing projects in this course, use the standards of good writing, including punctuation, grammar, usage, and spelling.
Project 2 — Persuasive Document

Using the discussion and examples in Chapter 6, plan and write a persuasion of 3 to 5 paragraphs. Here are the essential requirements:

1. Describe the audience and that audience’s need for this persuasion (including the workplace situation in which the persuasion is needed). Attach this audience information to the end of this document.

2. Toward the beginning of this persuasion, either state your main argumentative point or use a placeholder statement. Toward the end of this persuasion, repeat or state your main argumentative point.

3. Use strong logical appeals to support your main argumentative point.

4. Use rebuttals and concessions to address counterarguments.

5. Use personal and emotional appeals sensibly and ethically.

6. Use headings, bulleted and numbered lists, tables, and graphics as necessary to present information effectively.

7. Ensure that your persuasion meets your targeted audience’s needs and comprehension level (for example, by defining potentially unfamiliar terms).

8. As with all writing projects in this course, use the standards of good writing, including punctuation, grammar, usage, and spelling.
**Project 3 — Proposal**

Using the discussion and examples in Chapter 6, plan and write a proposal of 2 or more pages. Here are the essential requirements:

1. Describe the *audience* and that audience’s need for this proposal (including the workplace situation in which the proposal is needed). Attach this audience information to the end of this document.

2. Address a *real or realistic situation* involving a problem or opportunity for improvement—one that calls for a proposal.

3. In the proposal, describe the *situation* and proposed project.

4. Discuss *results, benefits, and feasibility* of the proposed project as necessary.

5. Include *procedures, schedules, and costs* related to the proposed project as necessary.

6. Present your *background and references*, or those of the organization you represent.

7. Use *headings, bulleted and numbered lists, tables, and graphics* as necessary to present information effectively.

8. Use whichever *overall format*—memo, business letter, or separate report-like document—is appropriate for the situation and audience of the proposal.

9. Use the *standards of good writing* (grammar, usage, style, punctuation, mechanics).

10. Write the proposal so it works effectively *as a proposal*, convincing its readers that a situation needs to be addressed with a project and that your plan and qualifications make you right to do that project.
Project 4 — Progress Report

Using the discussion and examples in Chapter 6, plan and write a progress report of 2 or more pages. Here are the essential requirements:

1. Describe the audience and that audience’s need for this progress report (including the workplace situation in which the progress report is needed). Attach this audience information to the end of this document.

2. Address a real or realistic situation involving a project about which readers need to know the status of.

3. Include an overall description of the project.

4. Describe the status of the project with details about work completed, work in progress, and work planned.

5. Address any concerns about the project but in a way that defends your professionalism.

6. Provide other supporting information as necessary—for example, adjusted schedules, expense reports, time sheets, outlines, drawing, photographs, and so on.

7. Use headings, bulleted and numbered lists, tables, and graphics as necessary to present information effectively.

8. Use whichever overall format—memo, business letter, or separate report-like document—is appropriate for the situation and audience of the progress report.

9. Use the standards of good writing (grammar, usage, style, punctuation, mechanics).

10. Write this report so that it works effectively as a progress report, informing readers of the status of the project, letting them know about concerns, but convincing them you are handling the project competently and professionally.
Chapter 6 — Reading Quiz

Read Chapter 6 of *Power Tools for Technical Communication*, and answer each of the following. (A multiple-choice version is available at the website for this book.)

1. Define the term *persuasion* as it is used in Chapter 6.

2. Explain which of the three appeals have a valid and legitimate role in persuasive efforts, which do not, and why.

3. If some of the appeals are not valid or legitimate, explain why they are used in “real world” persuasive efforts.

4. When you write persuasively, you can answer objections to your main argumentative point, showing how they are wrong or irrelevant. Explain what are Chapter 6’s terms for the objections and the answers to those objections.

5. If a tire salesperson refers to the record of trustworthiness and reliability of a certain tire manufacturer in an effort to get you to buy tires made by that manufacturer, which appeal is being used?

6. If that same salesperson refers to recent accidents suffered by drivers using tires made by a competitor, which appeal is being used?

7. Define *proposal* as the term is used in Chapter 6.

8. Explain why a proposal is essentially a persuasive effort.

9. Define *progress report* as the term is used in Chapter 6.

10. Explain why a progress report is essentially a persuasive effort.
Chapter 7. Headings

While they seem like window dressing, headings have a surprisingly positive impact on students’ writing. Headings focus students’ attention on the topics of sections and paragraphs—a kind of “outlining-on-the-fly.” As with outlining, though, students start by putting in the headings after they’ve written the draft. When they do, they discover that the headings don’t quite fit—that the transition to the new topic started in the preceding paragraph or that headings overlap. As students gain practice with headings, they start putting headings in before they draft each new sections. One reward is more focused, organized writing.

In a unit on headings, consider these goals:

- Understand the value of headings in technical and business documents: how they announce topics to be covered, indicate the organization of the document, and provide white space.
- Know what it means that headings can be “subordinate” to other headings.
- Spot instances where headings are vague, not adequately descriptive of the sections they introduce.
- Understand how “levels” of headings match the levels in an outline and how headings must be designed to indicate those levels.
- Spot instances where “lone” or “stacked” headings occur, where headings are not parallel in phrasing, or where pronouns refer to headings.

The best time to schedule a unit on headings is just before students write their first multipage document in your course: for example, 2- to 4-page instructions, proposals, recommendation reports. Avoid scheduling the headings unit with instructions, however. Too many other formatting issues come to bear on instructions—lists, notices, highlighting, illustrations, and even tables. Lighten the load: schedule the headings for an earlier unit.

The headings unit is a great time to turn the class session into a lab and get students to work the exercises listed in the following pages. The exercises on styles and CSS might seem a bit too technical at first. But let’s put the “technical” back into technical writing.
**Technical-Writing Lab: Headings**

In this lab, you use unformatted text to get some practice formatting text (both in regular documents and in web pages) to include headings, choosing headings for text, designing heading format and style, and using styles to make headings consistent and more efficient. All of the links in the following are available at:

www.io.com/~hcexres/power_tools/headings/

**Chapter 7 — Reading Quiz**

Before this lab, make sure you’ve read Chapter 7 and made a score on the reading quiz for this chapter as required by your instructor. This reading quiz is available at the following web address and can be e-mailed directly to your instructor:

www.io.com/~hcexres/power_tools/headings/headings_quiz.html

**Lab 1— Add Headings with a Specified Format**

*Word-processing document:* In this exercise, you use a specified format to add headings to unformatted text:

1. Go to the following web address, copy the text at that address, and paste it into your preferred word-processing software:
   
   www.io.com/~hcexres/power_tools/headings/headings_formatA.html

2. Read the instructions carefully on how to format the headings—specifically, the fonts, sizes, and positions on the page.

3. Put your name, Heading Formatting: Print, and the date on this document, and print it out for your instructor.

*Web-page document:* For this second part, do the same things that you did in the preceding but for a web page. To be ready for this project, you need to have studied Chapter 17 and have done at least one other web-page formatting project:

1. Go to the following web address, copy the text at that address, and paste it into your preferred word-processing software:
   
   www.io.com/~hcexres/power_tools/headings/headings_formatB.html

2. Using a simple text editor or web-page editor of your choice, create a simple web page like the one shown in Chapter 17 entitled My First Web Page. Between the `<TITLE>` and `</TITLE>` tags and between the `<H1>` and `</H1>` tags, substitute Heading Formatting: Web Pages.

3. Read the instructions carefully on how to format the headings—specifically, the fonts, sizes, and locations.
4. Put your name, Heading Formatting: Web Pages, and the date on this document, and print it out for your instructor.

Lab 2 — Identify Common Heading Problems

The technical publishing industry follows fairly well-established guidelines concerning headings. Using the excerpts at the following web address, get some practice identifying common problems with headings:

www.io.com/~hcexres/power_tools/headers/headers_problems.html

Lab 3 — Design Your Own Headings

**Word-processing document:** In this exercise, you design your own headings for unformatted text:

1. Go to the following web address, copy the text at that address, and paste it into your preferred word-processing software:

   www.io.com/~hcexres/power_tools/headers/heading_designA.html

2. Decide on the headings needed in this text and the points in the text where they are needed, and then insert those headings. Decide on the level and format of the headings, and format them accordingly.

3. Put your name, Heading Design: Print, and the date on this document, and print it out for your instructor.

**Web-page document:** For this second part, do the same things that you did in the preceding but for a web page. To be ready for this project, you need to have studied Chapter 17 and have done at least one other web-page formatting project:

1. Go to the following web address, copy the text at that address, and paste it into your preferred word-processing software:

   www.io.com/~hcexres/power_tools/headers/heading_designB.html

2. Using a simple text editor or web-page editor of your choice, create a simple web page like the one shown in Chapter 17 entitled My First Web Page. Between the \(<TITLE>\) and \</TITLE>\) tags and between the \(<H1>\) and \</H1>\) tags, substitute Heading Design: Web Pages.

3. Decide on the headings needed in this text and the points in the text where they are needed, and then insert those headings. Decide on the level and format of the headings, and format them accordingly.

4. Put your name, Heading Design: Web Pages, and the date on this document, and print it out for your instructor.
Lab 4 — Create Word-Processing Styles for Headings

Most word-processing software such as Microsoft Word, Corel WordPerfect, and Lotus Word Pro enable you to design “styles,” which save you time and keep your format consistent. This lab gives you some practice using styles:

1. Go to the following web address, copy the text at that address, and paste it into your preferred word-processing software:
   www.io.com/~hcexres/power_tools/headings/heading_styles.html

2. Read the instructions carefully on how to create the heading styles, and then reformat the text accordingly.

3. Put your name, Headings: Styles, and the date on this document, and print it out for your instructor.

Lab 5 — Create CSS Styles for Headings in Web Pages

Web pages provide a method similar to the styles used in word-processing software. They also save you time and keep your format consistent. This method is called Cascading Style Sheets (CSS). This next lab gives you some practice using CSS in web pages:

1. Go to the following web address, copy the text at that address, and paste it into your preferred word-processing software:
   www.io.com/~hcexres/power_tools/headings/headings_css.html

2. Read the instructions carefully on how to create the CSS heading tags, and then apply those tags to the text accordingly.

3. Put your name, Heading: CSS, and the date on this document, and print it out for your instructor.
Chapter 7 — Reading Quiz

Read Chapter 7 of *Power Tools for Technical Communication*, and answer each of the following. (A multiple-choice version is available at the website for this book.)

1. Define the term *heading* as it used in Chapter 7.

2. Explain what it means for one heading to be *subordinate* to another.

3. Describe *stacked headings* as the term is used in this chapter.

4. Describe *lone headings* as the term is used in this chapter.

5. Explain what are *task-oriented headings* and which writing situations you’d use them in.

6. What does it mean for headings to be *parallel in phrasing*? Provide an example.

7. Imagine that you have the following situation: you have a chapter of a report that provides background on insects that can attack vegetable gardens in the Midwest. Create a heading that gives as complete an idea of that section as you can without becoming overly long.

8. Explains what it means that headings can have different “levels.”

9. Describe the difference between items in an outline and headings in a corresponding text.

10. Explain how you design headings so that they indicate different levels.
Chapter 8 — Lists

This chapter in PowerTools introduces students to the use and format of “in-sentence” lists, numbered and bulleted lists, and other varieties of lists. As with other page-design elements covered in Part 2 of Power Tools, lists are another “new thing” for students—something that will set your technical writing course apart from your students’ past writing courses.

The following materials and the supporting website provide practice that will enable students to:

- Understand the value of lists: how they provide emphasis, increase readability, and create white space.
- Define lists—their phrasing, location in a text, levels, and format.
- Learn how to create lists in common word-processing applications such as Word, WordPerfect, WordPro.
- Learn how to create common varieties of lists in web page documents.
- Reformat text with specified types of lists.
- Reformat text with lists of students’ own design.
- Spot common problems with lists.
- Find areas of text to reformat with lists.

The best time to schedule a unit on lists is just before students write instructions. Instructions typically employ lots of numbered lists, as well as a few simple and bulleted lists. Instructions provide a serious workout for this page-design feature.

The lists unit is another great time to turn the class session into a lab and get students to work the exercises in the following pages. Make sure students come to this lab having read the chapter and passed the quiz. In the lab, they reformat text to include lists—either as specified by the exercises or on their own.
Technical-Writing Lab: Lists

In this lab, you get some practice formatting text (both in regular documents and in web pages) to include lists, deciding on the type of lists, and creating them with your word-processing software. All of the links in the following are available at:

www.io.com/~hcexres/power_tools/lists/

Chapter 8 — Reading Quiz

Before this lab, make sure you’ve read Chapter 8 and made a score on the reading quiz for this chapter as required by your instructor. This reading quiz is available at the following web address and can be e-mailed directly to your instructor:

www.io.com/~hcexres/power_tools/lists/lists_quiz.html

Lab 1 — Create Lists with Specified Format

Word-processing document: In this exercise, you use a specified format to add lists to unformatted text:

1. Go to the following web address, copy the text at that address, and paste it into your preferred word-processing software:

www.io.com/~hcexres/power_tools/lists/lists_formatA.html

2. Read the instructions carefully on the format of the lists—specifically, the types, indents, margins, capitalization, punctuation.

3. Put your name, List Formatting: Print, and the date on this document, and print it out for your instructor.

Web-page document: For this second part, do the same things that you did in the preceding but for a web page. To be ready for this project, you need to have studied Chapter 17 and have done at least one other web-page formatting project:

1. Go to the following web address, copy the text at that address, and paste it into your preferred word-processing software:

www.io.com/~hcexres/power_tools/lists/lists_formatB.html

2. Using a simple text editor or web-page editor of your choice, create a simple web page like the one shown in Chapter 17 entitled My First Web Page. Between the <TITLE> and </TITLE> tags and between the <H1> and </H1> tags, substitute Web Lists 1.

3. Read the instructions carefully on the format of the lists—specifically, the types, indents, margins, capitalization, punctuation.

4. Put your name, List Formatting: Online, and the date on this document, and print it out for your instructor.
Lab 2 — Identify Common List Problems

The technical publishing industry follows some guidelines concerning lists. Using the excerpts at the following web address, get some practice identifying common problems with lists:

www.io.com/~hcexres/power_tools/lists/lists_problems.html

Lab 3 — Design Your Own Lists

Word-processing document: In this exercise, you design your own lists for unformatted text:

1. Go to the following web address, copy the text at that address, and paste it into your preferred word-processing software:
   www.io.com/~hcexres/power_tools/lists/lists_designA.html

2. Study the text carefully to identify which areas can be reformatted as lists. Reformat the text accordingly, making sure to follow all the list guidelines.

3. Put your name, List Design: Print, and the date on this document, and print it out for your instructor.

Web-page document: For this second part, do the same things that you did in the preceding but for a web page. To be ready for this project, you need to have studied Chapter 17 and have done at least one other web-page formatting project:

1. Go to the following web address, copy the text at that address, and paste it into your preferred word-processing software:
   www.io.com/~hcexres/power_tools/lists/lists_designB.html

2. Using a simple text editor or web-page editor of your choice, create a simple web page like the one shown in Chapter 17 entitled My First Web Page. Between the <TITLE> and </TITLE> tags and between the <H1> and </H1> tags, substitute Web List Design.

3. Study the text carefully to identify which areas can be reformatted as lists. Reformat the text accordingly, making sure to follow all the list guidelines.

4. Put your name, List Design: Web Pages, and the date on this document, and print it out for your instructor.
Chapter 8 — Reading Quiz

Read Chapter 8 of Power Tools for Technical Communication, and answer each of the following. (A multiple-choice version is available at the website for this book.)

1. Define the term *lists* as it used in Chapter 8 of Power Tools.

2. Explain the difference between using numbered lists as opposed to bulleted lists.

3. Describe the difference between the in-sentence list and the simple list.

4. Explain what should precede a list and how it should be punctuated.

5. Explain what it means for lists to be parallel in phrasing; provide an example of list items that are *not* parallel in phrasing.

6. State the guidelines in Chapter 8 for punctuating individual list items.

7. Describe which type of list you would use for three important points in a summary of a report.

8. Describe which type of list you would use for directions to the airport.

9. Describe the *nested list* and the format it uses.

10. Describe the *labeled list* and the format it uses.
Chapter 9. Notices

This chapter in *PowerTools* introduces students to the use and format of notices—those specially formatted caution, warning, and danger items that you see everywhere in instructions, user guides, and product packaging and labeling. As with other page-design elements covered in Part 2 of *Power Tools*, notices are another “new thing” for students—something that will set your technical writing course apart from their past writing courses.

This section and the supporting website provide the following practice that will enable students to:

- Understand the value of notices: how they increase “noticeability” without sacrificing readability.
- Explore the use of notices in instructions, user guides, and product packaging and labeling.
- Spot text that should be reformatted as a notice.
- Create notices in common word-processing applications such as Word, WordPerfect, WordPro.
- Create notices for web page documents.
- Reformat text with specified types of notices.
- Reformat text with the types of notice that your students design.

The best time to schedule a unit on notices—in fact, about the only time to do so—is just before students write instructions. Instructions typically employ notices; you’ll need to prompt your students to include them. In other documents such as reports, however, students need nothing more than the simple note.

The notice unit is another great time to turn the class session into a lab and get students to work the exercises in the following pages. Make sure students come to this lab having read the chapter and passed quiz. In the lab, they reformat text to include notices—either as specified by the exercises or on their own.
Technical-Writing Lab: Notices

In this lab, you get some practice formatting text (both in regular documents and in web pages) to include notices, deciding on the type of notices, and creating them with your word-processing software. All of the links in the following are available at:

www.io.com/~hcexres/power_tools/notices/

Chapter 9 — Reading Quiz

Before this lab, make sure you’ve read Chapter 9 and made a score on the reading quiz for this chapter as required by your instructor. This reading quiz is available at the following web address and can be e-mailed directly to your instructor:

www.io.com/~hcexres/power_tools/notices/notices_quiz.html

Lab 1 — Research Notices

Spend some time around your home or workplace collecting instructions and product labels or packaging that use notices. Set up a table like the following to record your observations:

<table>
<thead>
<tr>
<th>Notice type</th>
<th>Situation</th>
<th>Format &amp; style</th>
<th>Chapter 9 notice type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warning</td>
<td>This notice on a tube of toothpaste tube warns to keep out of reach of children.</td>
<td>The word “warning” is all caps bold, but the text of the warning is regular.</td>
<td>This would be a warning notice according to chapter 9.</td>
</tr>
</tbody>
</table>

Lab 2 — Identify Text for Notices

While the technical publishing industry does not have one standardized system of notices, individual industries follow their own standardized designs. Using the excerpts at the following web address, get some practice identifying text that can be reformatted as notices, using one such design:

www.io.com/~hcexres/power_tools/notices/notice_types.html
Lab 3 — Identify Elements of Notices

It’s not enough to warn readers not to do something; you must add other elements to make notices effective. Using the excerpts at the following web address, get some practice identifying the essential elements of notices (action, condition, consequence, recovery):

www.io.com/~hcexres/power_tools/notices/notice_elements.html

Lab 4 — Create Notices with a Specified Format

*Word-processing document:* In this exercise, you use a specified format to add notices to unformatted text:

1. Go to the following web address, copy the text at that address, and paste it into your preferred word-processing software:

   www.io.com/~hcexres/power_tools/notices/notice_formatA.html

2. Using the instructions at that web address, reformat the designated text according to the type of notices specified.

3. Put your name, *Notice Formatting: Print*, and the date on this document, and print it out for your instructor.

*Web-page document:* For this second part, do the same things that you did in the preceding but for a web page. To be ready for this project, you need to have studied Chapter 17 and have done at least one other web-page formatting project:

1. Go to the following web address, copy the text at that address, and paste it into your preferred word-processing software:

   www.io.com/~hcexres/power_tools/notices/notice_formatB.html

2. Using a simple text editor or web-page editor of your choice, create a simple web page like the one shown in Chapter 17 entitled *My First Web Page*. Between the `<TITLE>` and `<TITLE>` tags and between the `<H1>` and `<H1>` tags, substitute *Notice Formatting: Web Pages*.

3. Using the instructions at that web address, reformat the designated text according to the types of notices specified.

4. Put your name, *Notice Formatting: Web Pages*, and the date on this document, and print it out for your instructor.

Lab 5 — Design Your Own Notices

*Word-processing document:* In this exercise, you design your own notices for unformatted text:

1. Go to the following web address, copy the text at that address, and paste it into your preferred word-processing software:

   www.io.com/~hcexres/power_tools/notices/notices_designA.html
2. Study the text carefully to identify which areas can be reformatted as notices. Reformat the text accordingly, making sure to follow all the notice guidelines.

3. Put your name, Notice Design: Print, and the date on this document, and print it out for your instructor.

Web-page document: For this second part, do the same things that you did in the preceding but for a web page. To be ready for this project, you need to have studied Chapter 17 and have done at least one other web-page formatting project:

1. Go to the following web address, copy the text at that address, and paste it into your preferred word-processing software:

   www.io.com/~hcexres/power_tools/notices/notices_designB.html

2. Using a simple text editor or web-page editor of your choice, create simple web page like the one shown in Chapter 17 entitled My First Web Page. Between the <TITLE> and </TITLE> tags between the <H1> and </H1> tags, substitute Notice Design: Web Pages.

3. Study the text carefully to identify which areas can be reformatted as notices. Reformat the text accordingly, making sure to follow all the notice guidelines.

4. Put your name, Notice Design: Web Pages, and the date on this document, and print it out for your instructor.
Chapter 9 — Reading Quiz

Read Chapter 9 of Power Tools for Technical Communication, and answer each of the following. (A multiple-choice version is available at the website for this book.)

1. Define the notice as the term is used in Chapter 9.

2. Explain the highlighting problems that notices enable you to avoid.

3. Which type of notice would you use to alert people to the possibility that x-ray equipment might erase data on their computer storage devices?

4. Explain the difference between the warning and the caution notice as they are defined in this chapter.

5. Explain which type of notice you would use for a statement on a coffee machine that the surfaces of the machine may be hot.

6. Imagine you are asked to design a system of three notices for a company and its products. Explain the strategy you’d use in making the notices distinct from each other.

7. Explain the meaning of telegraphic writing and reasons why it should or should not be used in notices.

8. Describe the elements to consider including in a notice, especially notices involving potential injury or damage.

9. Explain the difference between the warning and the danger notice as they are defined in this chapter.

10. Technical writing applies to a variety of document types such as recommendation reports, proposals, instructions, and even business letters. Explain which type you would expect to see the most notices in and why.
Chapter 10. Tables, Graphs, Charts

This chapter in *PowerTools* introduces students to the use and format of tables, followed by graphs and charts. The chapter argues that graphs and charts are more vivid but less detailed representations of the data in tables.

The following materials and the supporting website provide practice that will enable students to:

- Understand the value of tables, graphs, and charts: how they present data more efficiently or more dramatically.
- Spot text that can be reformatted as a table, graph, or chart.
- Create tables, graphs, and charts in common word-processing applications such as Word, WordPerfect, WordPro.
- Create tables, graphs, and charts in web page documents.
- Reformat specified segments of text as a table, graph, or chart.
- Know common guidelines for the design of tables, graphs, or charts.

Any short report project is a good time to schedule this unit on tables, graphs, and charts. For example, primary research report (Chapter 2) uses a variety of tables, graphs, and charts to present findings. The recommendation report (Chapter 4) makes use of a “summary” table to pull comparative together into one spot.

A unit on tables, graphs, and charts is another great time to turn the class session into a lab and get students to work the exercises in the following pages. Make sure students come to this lab having read the chapter and having passed the online reading quiz. In the labs, they reformat text to include tables, graphs, or charts or create them from raw data.

The exercises on creating tables, graphs, and charts may seem a bit too technical at first. But let’s put the “technical” back in technical communication and technical writing courses.
Technical-Writing Lab: Tables, Graphs, Charts

In this lab, you get some practice creating tables, graphs, and charts (both in regular documents and in web pages) in your preferred software. All of the links in the following are available at:

www.io.com/~hcexres/power_tools/tables/

Chapter 10 — Reading Quiz

Before this lab, make sure you’ve read Chapter 10 and made a score on the reading quiz for this chapter as required by your instructor. This reading quiz is available at the following web address and can be e-mailed directly to your instructor:

www.io.com/~hcexres/power_tools/tables/tables_quiz.html

Lab 1 — Create Tables

**Word-processing document:** In this exercise, you use raw data to create tables, or you convert data presented in paragraphs into tables:

1. Go to the following web address, copy the text at that address, and paste it into your preferred word-processing software:
   
   www.io.com/~hcexres/power_tools/tables/tables_formatA.html

2. Read the instructions carefully on how to design and construct the tables—in particular, orientation, alignment, titles, row and column headings, capitalization, and highlighting.

3. Put your name, Table Formatting: Print, and the date on this document, and print it out for your instructor.

**Web-page document:** For this second part, do the same things that you did in the preceding but for a web page. To be ready for this project, you need to have studied Chapter 17 and have done at least one other web-page formatting project:

1. Go to the following web address, copy the text at that address, and paste it into your preferred word-processing software:
   
   www.io.com/~hcexres/power_tools/tables/tables_formatB.html

2. Using a simple text editor or web-page editor of your choice, create a simple web page like the one shown in Chapter 17 entitled My First Web Page. Between the `<TITLE>` and `</TITLE>` tags and between the `<H1>` and `</H1>` tags, substitute Table Formatting: Web Pages.

3. Read the instructions carefully on how to design and construct the tables—in particular, orientation, alignment, titles, row and column headings, capitalization, and highlighting.
4. Put your name, Table Formatting: Web Pages, and the date on this document, and print it out for your instructor.

Lab 2 — Create Graphs

Word-processing document: In this exercise, you use raw data or tables to create graphs, or you convert data presented in paragraphs into graphs:

1. Go to the following web address, copy the text at that address, and paste it into your preferred word-processing software:
   www.io.com/~hcexres/power_tools/tables/graphs_formatA.html

2. Read the instructions carefully on how to design and construct the graphs—in particular, orientation, legends, axis labels, and titles.

3. Put your name, Graph Formatting: Print, and the date on this document, and print it out for your instructor.

Web-page document: For this second part, do the same things that you did in the preceding but for a web page. To be ready for this project, you need to have studied Chapter 17 and have done at least one other web-page formatting project:

1. Go to the following web address, copy the text at that address, and paste it into your preferred word-processing software:
   www.io.com/~hcexres/power_tools/tables/graphs_formatB.html

2. Using a simple text editor or web-page editor of your choice, create a simple web page like the one shown in Chapter 17 entitled My First Web Page. Between the <TITLE> and </TITLE> tags and between the <H1> and </H1> tags, substitute Graph Formatting: Web Pages.

3. Read the instructions carefully on how to design and construct the graphs—in particular, orientation, legends, axis labels, and titles.

4. Put your name, Graph Formatting: Web Pages, and the date on this document, and print it out for your instructor.

Lab 3 — Create Charts

Word-processing document: In this exercise, you use raw data or tables to create charts, or you convert data presented in paragraphs into charts:

1. Go to the following web address, copy the text at that address, and paste it into your preferred word-processing software:
   www.io.com/~hcexres/power_tools/tables/charts_formatA.html

2. Read the instructions carefully on how to design and construct the charts—in particular, orientation, legends, axis labels, and titles.
3. Put your name, Chart Formatting: Print, and the date on this document, and print it out for your instructor.

Web-page document: For this second part, do the same things that you did in the preceding but for a web page. To be ready for this project, you need to have studied Chapter 17 and have done at least one other web-page formatting project:

1. Go to the following web address, copy the text at that address, and paste it into your preferred word-processing software:
   www.io.com/~hcexres/power_tools/tables/charts_formatB.html

2. Using a simple text editor or web-page editor of your choice, create a simple web page like the one shown in Chapter 17 entitled My First Web Page. Between the <TITLE> and </TITLE> tags and between the <H1> and </H1> tags, substitute Chart Formatting: Web Pages.

3. Read the instructions carefully on how to design and construct the charts—in particular, orientation, legends, axis labels, and titles.

4. Put your name, Chart Formatting: Web Pages, and the date on this document, and print it out for your instructor.

Lab 4 — Design Your Own Tables, Graphs, and Charts

Word-processing document: In this exercise, you study technical texts to see if you can convert portions of them into tables, graphs, or charts:

1. Go to the following web address, copy the text at that address, and paste it into your preferred word-processing software:
   www.io.com/~hcexres/power_tools/tables/all_designA.html

2. Study the text carefully for areas that can be better presented as tables, graphs, or charts.

3. Reformat accordingly, using the guidelines you’ve studied in Chapter 10.

4. Put your name, Table, Graph and Chart Design: Print, and the date on this document, and print it out for your instructor.

Web-page document: For this second part, do the same things that you did in the preceding but for a web page. To be ready for this project, you need to have studied Chapter 17 and have done at least one other web-page formatting project:

1. Go to the following web address, copy the text at that address, and paste it into your preferred word-processing software:
   www.io.com/~hcexres/power_tools/tables/all_designB.html

2. Using a simple text editor or web-page editor of your choice, create a simple web page like the one shown in Chapter 17 entitled My First Web Page. Between the
<TITLE> and </TITLE> tags and between the <H1> and </H1> tags, substitute Table, Graph and Chart Design: Web Pages.

3. Study the text carefully for areas that can be better presented as tables, graphs, or charts.

4. Reformat accordingly, using the guidelines you’ve studied in Chapter 10.

5. Put your name, Table, Graph and Chart Design: Web Pages, and the date on this document, and print it out for your instructor.
Chapter 10 — Reading Quiz

Read Chapter 10 of Power Tools for Technical Communication, and answer each of the following. (A multiple-choice version is available at the website for this book.)

1. Explain the difference between graphs and charts, as presented in Chapter 10.

2. If you want readers to get precise data (to the penny, for example), explain which of the following to use and why: table, graph, or chart.

3. If you want readers to get a vivid sense of differences or trends in data, explain which of the following to use and why: table, graph, or chart.

4. When you design a table, you can arrange data in columns or rows. To enable readers to compare data on four different products, what does this chapter recommend?

5. If each of the numbers in a table column represents a measurement in millimeters, how do you indicate that fact?

6. Where does this chapter recommend placing the titles of tables, graphs, and charts?

7. Explain what Chapter 10 means that you must label the axes of graphs and charts.

8. Graphs and charts often contain a box that indicates the meanings of different colors, shading, line styles, or textures. What is the name for this box?

9. When you’ve correctly designed and formatted a table, graph, or chart and placed it at the proper point in text, there are still two things you must do. Explain what those are.

10. Most word-processing and desktop-publishing software enables you to create graphs or charts. In general terms, explain how you create graphs and charts for web pages.
Chapter 11. Illustrative Graphics

This chapter in *PowerTools* introduces students to strategies for planning graphics for writing projects and essential techniques for copying and modifying graphics and adding graphics to both word-processing documents as well as web pages.

The following materials and the supporting website provide practice that will enable students to:

- Know the value of illustrative graphics in technical text.
- Make screen captures of images and copy graphics from the Web.
- Convert graphics, including screen captures, for use on web pages.
- Learn techniques for cropping, sizing, and labelling graphics.
- Practice adding graphics to word-processing documents and to web pages.
- Practice cross-referencing graphics, adding figure titles to graphics, and indicating the source of graphics.

Just about any brief writing project early in the semester is a good time to schedule a unit on illustrative graphics. One of the best is description—or any of its applications. Your student will need to illustrate the objects they are describing.

A unit on illustrative graphics unit is another great time to turn the class session into a lab and get students to work the exercises in the following pages. Make sure students come to this lab having read the chapter and having passed the quiz. In the labs, they study unillustrated text for graphics possibilities, add graphics to text, and practice creating figure titles, source identifiers, and cross-references.

In a technical communication course, we cannot expect our students to create drawings and diagrams from scratch. However, they can adapt existing graphics for use in their technical documents. Importing, converting, positioning, anchoring, sizing, cropping, labelling—these may seem like complex tasks at first. But if our courses are to be worthy of the name “technical communication,” our students need time to learn these relatively simple graphics techniques.
Technical-Writing Lab: Illustrative Graphics

In this lab, you practice modifying graphics and adding graphics to technical text (both in regular documents and in web pages). Don’t worry—you don’t have to be a graphics professional to do the following exercises. You’ll simply be practicing the techniques that most professional technical writers use. All of the links in the following are available at:

www.io.com/~hcexres/power_tools/graphics/

Chapter 11 — Reading Quiz

Before this lab, make sure you’ve read Chapter 11, and made a score on the reading quiz for this chapter as required by your instructor. This reading quiz is available at the following web address and can be e-mailed directly to your instructor:

www.io.com/~hcexres/power_tools/graphics/graphics_quiz.html

Lab 1 — Plan Graphics for Writing Projects

When people first start using graphics in technical documents, they often overlook good spots to include graphics. Using the excerpts at the following web address, practice looking for opportunities to incorporate graphics:

www.io.com/~hcexres/power_tools/graphics/plan_graphics.html

Lab 2 — Copy Graphics from the World Wide Web

Word-processing document: In this exercise, you copy a graphic from a web page and insert it into a word-processing document:

1. Go to the following web address, copy the text at that address, and paste it into your preferred word-processing software:

   www.io.com/~hcexres/power_tools/graphics/graphics_formatA.html

2. Using the instructions at that web address, copy the graphic, and paste it into your document at the specified spot.

3. Put your name, Graphics Formatting: Print, and the date on this document, and print it out for your instructor.

Web-page document: For this second part, do the same things that you did in the preceding but for a web page. To be ready for this project, you need to have studied Chapter 17 and have done at least one other web-page formatting project:

1. Using a simple text editor or web-page editor of your choice, create a simple web page like the one shown in Chapter 17 entitled My First Web Page. Between the <TITLE> and </TITLE> tags and between the <H1> and </H1> tags, substitute Graphics Formatting: Web Pages.
2. Go to the following web address, copy the text at that address, and paste it into the
document you started in the preceding step:

www.io.com/~hcexres/power_tools/graphics/graphics_formatB.html

3. Using the instructions at that web address, copy the graphic, and paste it into your
document at the specified spot.

4. Put your name, Graphics Formatting: Web Pages, and the date on this
document, and print it out for your instructor.

Lab 3 — Make Screen Captures

Word-processing document: In this exercise, you make a screen capture of a graphic and
then insert it into a word-processing document:

1. Go to the following web address, and follow the instructions there for finding a screen
capture and pasting it into a word-processing document:

www.io.com/~hcexres/power_tools/graphics/graphics_screenA.html

2. Again using the same instructions at that web address, start a new document and paste
the screen capture into it.

3. Put your name, Graphics Screen Captures: Print, and the date on this
document, and print it out for your instructor.

Web-page document: For this second part, do the same things that you did in the preceding
but for a web page. To be ready for this project, you need to have studied Chapter 17 and
have done at least one other web-page formatting project:

1. Using a simple text editor or web-page editor of your choice, create a simple web page
like the one shown in Chapter 17 entitled My First Web Page. Between the
<TITLE> and </TITLE> tags and between the <H1> and </H1> tags, substitute
Graphics Screen Captures: Web Pages.

2. Go to the following web address, and using the same instructions there, paste the
screen capture into it:

www.io.com/~hcexres/power_tools/graphics/graphics_screenB.html

3. Put your name, Graphics Screen Captures: Web Pages, and the date on this
document, and print it out for your instructor.

Lab 4 — Crop Graphics

Word-processing document: In this exercise, you “crop” a graphic—that is, take a portion
of it—and insert it into a word-processing document:

1. Go to the following web address, and follow the instructions there for cropping a
graphic:

www.io.com/~hcexres/power_tools/graphics/crop_graphicsA.html
2. Again using the same instructions at that web address, start a new document and paste into it the graphic you just cropped.

3. Put your name, Cropping Graphics: Print, and the date on this document, and print it out for your instructor.

Web-page document: For this second part, do the same things that you did in the preceding but for a web page. To be ready for this project, you need to have studied Chapter 17 and have done at least one other web-page formatting project:

1. Using a simple text editor or web-page editor of your choice, create a simple web page like the one shown in Chapter 17 entitled My First Web Page. Between the \texttt{<TITLE>} and \texttt{</TITLE>} tags and between the \texttt{<H1>} and \texttt{</H1>} tags, substitute Cropping Graphics: Web Pages.

2. Go to the following web address, and follow the instructions there for cropping a graphic:
   
   www.io.com/~hcexres/power_tools/graphics/crop_graphicsB.html

3. Put your name, Cropping Graphics: Web Pages, and the date on this document, and print it out for your instructor.

Lab 5 — Size Graphics

Word-processing document: In this exercise, you “size” a graphic—that is, reduce or enlarge it—and insert it into a word-processing document:

1. Go to the following web address, and follow the instructions there for sizing a graphic:
   
   www.io.com/~hcexres/power_tools/graphics/size_graphicsA.html

2. Again using the same instructions at that web address, start a new document and paste into it the graphic you just sized.

3. Put your name, Sizing Graphics: Print, and the date on this document, and print it out for your instructor.

Web-page document: For this second part, do the same things that you did in the preceding but for a web page. To be ready for this project, you need to have studied Chapter 17 and have done at least one other web-page formatting project:

1. Using a simple text editor or web-page editor of your choice, create a simple web page like the one shown in Chapter 17 entitled My First Web Page. Between the \texttt{<TITLE>} and \texttt{</TITLE>} tags and between the \texttt{<H1>} and \texttt{</H1>} tags, substitute Sizing Graphics: Web Pages.

2. Go to the following web address, and follow the instructions there for sizing a graphic:
   
   www.io.com/~hcexres/power_tools/graphics/size_graphicsB.html

3. Put your name, Sizing Graphics: Web Pages, and the date on this document, and print it out for your instructor.
Lab 6 — Label Graphics

*Word-processing document:* In this exercise, you add labels to graphics, and insert those graphics into a word-processing document:

1. Go to the following web address, and follow the instructions there for starting a new document and pasting a graphic into it:
   
   www.io.com/~hcexres/power_tools/graphics/label_graphicsA.html

2. Again using the same instructions at that web address, add labels to the graphic you pasted into the document in the preceding step.

3. Put your name, Labeling Graphics: Print, and the date on this document, and print it out for your instructor.

*Web-page document:* For this second part, do the same things that you did in the preceding but for a web page. To be ready for this project, you need to have studied Chapter 17 and have done at least one other web-page formatting project:

1. Using a simple text editor or web-page editor of your choice, create a simple web page like the one shown in Chapter 17 entitled My First Web Page. Between the <TITLE> and </TITLE> tags and between the <H1> and </H1> tags, substitute Labelling Graphics: Web Pages.

2. Go to the following web address, and follow the instructions there for labeling a graphic:

   www.io.com/~hcexres/power_tools/graphics/label_graphicsB.html

3. Using the same instructions, incorporate into your web page the graphic you labeled in the preceding step.

4. Put your name, Labeling Graphics: Web Pages, and the date on this document, and print it out for your instructor.

Lab 7 — Create a Simple Geometrical Drawing

In this exercise, you create a simple geometrical drawing, which you could insert into either a word-processing document or a web page:

1. Go to the following web address, and follow the instructions there for starting a new document:

   www.io.com/~hcexres/power_tools/graphics/geometric_drawing.html

2. Again using the same instructions at that web address, create the drawing, step by step using your preferred word-processing or graphics application.

3. Put your name, Geometrical Drawing: Print, and the date on this document, and print it out for your instructor.
Lab 8 — Import and Position Graphics

Word-processing document: In this exercise, you explore different ways to import graphics into word-processing documents and to position them within those documents:

1. Go to the following web address, and follow the instructions there for starting a new document and importing a graphic into that document:
   www.io.com/~hcexres/power_tools/graphics/import_graphicsA.html

2. Again using the same instructions at that web address, experiment with different ways to position a graphic within a document.

3. Put your name, Positioning Graphics: Print, and the date on this document, and print it out for your instructor.

Web-page document: For this second part, do the same things that you did in the preceding but for a web page. To be ready for this project, you need to have studied Chapter 17 and have done at least one other web-page formatting project:

1. Using a simple text editor or web-page editor of your choice, create a simple web page like the one shown in Chapter 17 entitled My First Web Page. Between the <TITLE> and </TITLE> tags and between the <H1> and </H1> tags, substitute Positioning Graphics: Web Pages.

2. Go to the following web address, and follow the instructions there for adding graphics to web pages and positioning them on those pages:
   www.io.com/~hcexres/power_tools/graphics/import_graphicsB.html

3. Put your name, Importing Graphics: Web Pages, and the date on this document, and print it out for your instructor.

Lab 9 — Add Figure Titles, Documentation, and Cross-References

Word-processing document: In this exercise, you add figure titles, source documentation, and cross-references to graphics that you import into a word-processing document:

1. Go to the following web address, and follow the instructions there for starting a new document and pasting a graphic into it:
   www.io.com/~hcexres/power_tools/graphics/finish_graphicsA.html

2. Again using the same instructions at that web address, add a figure title, documentation, and a cross-reference to the graphic you pasted into the document in the preceding step.

3. Put your name, Completing Graphics: Print, and the date on this document, and print it out for your instructor.
Web-page document: For this second part, do the same things that you did in the preceding but for a web page. To be ready for this project, you need to have studied Chapter 17 and have done at least one other web-page formatting project:

1. Using a simple text editor or web-page editor of your choice, create a simple web page like the one shown in Chapter 17 entitled My First Web Page. Between the <TITLE> and </TITLE> tags and between the <H1> and </H1> tags, substitute Completing Graphics: Web Pages.

2. Using the instructions at the following web address, add a graphic to the web page you just created as well as a figure title, documentation, and a cross-reference to that graphic:

   www.io.com/~hcexres/power_tools/graphics/finish_graphicsB.html

3. Put your name, Completing Graphics: Web Pages, and the date on this document, and print it out for your instructor.
Chapter 11 — Reading Quiz

Read Chapter 11 of Power Tools for Technical Communication and answer each of the following. (A multiple-choice version is available at the website for this book.)

1. Explain what illustrative graphic refers to and what it does not refer to, as the term is used in Chapter 11.

2. Chapter 11 encourages you to use cross-references in relation to graphics. Explain how cross-references work and why they are useful.

3. Explain which type of illustrative graphic provides the least amount of realistic, illustrative detail.

4. When you copy all or part of what is displayed on a computer screen, what is it called?

5. When you select a segment of an existing graphic, what is that action called?

6. For illustrative graphics, where should you place the figure number and title?

7. In this chapter, what are the words and phrases that identify the parts of a graphic called?

8. When and how should you indicate the source of a graphic that you are using in a document?

9. If you’ve sized and cropped a graphic, added identifying labels, included a figure number and title, and cited your source for that graphic, what else is there to do?

10. Explain which areas you should place graphics in a document (beginning, middle, end, etc.).
Chapter 12. Highlighting and Emphasis

This chapter in *Power Tools* introduces students to strategies for using highlighting (bold, italics, caps, alternate fonts, and color) in their documents and provides some practice in highlighting word-processing documents as well as web pages.

This section and the supporting website provide the following practice that will enable students to:

- Understand the value of highlighting text as well as the perils of too much highlighting.
- Explore highlighting styles used in a variety of technical documents.
- Plan a highlighting scheme for writing projects.
- Use bold, italics, color, and alternate fonts in word-processing documents and in web pages.
- Create character styles in word-processing documents to improve the process of highlighting word-processing documents.
- Practice highlighting documents according to a specified highlighting scheme in both word-processing documents and web pages.

Probably the best time to schedule a highlighting unit is conjunction with the instructions unit. If students write instructions involving any sort of machinery, appliances, or computer interfaces, they will have questions: how to represent the labels on the buttons and switches on the machinery; how to show information displayed on screens or LED panels; how to refer to items people click on computer screens.

A highlighting unit is another good one to take the class to the computer lab to work the exercises in the following pages. Make sure students come to this lab having read the highlighting chapter and having passed the quiz. In the lab, they determine highlighting schemes for existing text, add highlighting according to an existing highlighting scheme, explore the use of styles to make highlighting more efficient and consistent, and learn how to add highlighting to web pages.
Technical-Writing Lab: Highlighting

In this lab, you get some practice determining the highlighting scheme used in a technical text, applying a highlighting scheme to unhighlighted text, and using styles in word-processing software to make highlighting more efficient and consistent. All of the links in the following are available at:

www.io.com/~hcexres/power_tools/highlighting/

Chapter 12 — Reading Quiz

Before this lab, make sure you’ve read Chapter 12 and made a score on the reading quiz for this chapter as required by your instructor. This reading quiz is available at the following web address and can be e-mailed directly to your instructor:

www.io.com/~hcexres/power_tools/graphics/highlighting_quiz.html

Lab 1 — Explore Highlighting Styles

Find two or three technical documents (such as user guides, operator manuals, or technical reference works), and study how they use bold, italics, caps, quotation marks, color, and alternate fonts. Try to find documents that use contrastive highlighting styles: for example, a document with little or no highlighting and another with a complex highlighting style. To record your observations, create a table similar to the following:

<table>
<thead>
<tr>
<th>Description</th>
<th>Highlighting</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information displayed on LED</td>
<td>Courier New</td>
<td>The LED readout displays 888</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Lab 2 — Add Highlighting to Documents

Word-processing document: In this exercise, you add highlighting to a word-processing document according to a highlighting scheme:

1. Go to the following web address, copy the text at that address, and paste it into your preferred word-processing software:

   www.io.com/~hcexres/power_tools/graphics/highlighting_formatA.html

2. Highlight words and phrases in the text according to the instructions at the web address.

3. Put your name, Highlighting: Print, and the date on this document, and print it out for your instructor.
For this second part, do the same things that you did in the preceding but for a web page. To be ready for this project, you need to have studied Chapter 17 and have done at least one other web-page formatting project:

1. Using a simple text editor or web-page editor of your choice, create a simple web page like the one shown in Chapter 17 entitled My First Web Page. Between the <TITLE> and </TITLE> tags and between the <H1> and </H1> tags, substitute Highlighting: Web Pages.

2. Go to the following web address, copy the text at that address, and paste it into the document you started in the preceding step:
   www.io.com/~hcexres/power_tools/graphics/highlighting_formatB.html

3. Highlight words and phrases the text according to the instructions at the web address.

4. Put your name, Highlighting: Web Pages, and the date on this document, and print it out for your instructor.

**Lab 3 — Using Character Styles for Highlighting**

In this exercise, you explore how to use “character styles” (a feature provided by most word-processing software) to make highlighting more efficient and consistent:

1. Go to the following web address, copy the text at that address, and paste it into your preferred word-processing software:
   www.io.com/~hcexres/power_tools/graphics/character_styles.html

2. Using the instructions at the preceding web address, develop a set of character styles which you can use to highlight the text you just pasted into the word-processing document.

3. Highlight the text using the highlighting scheme provided at the preceding web address and the character styles you created in the preceding step.

4. Put your name, Character Styles, and the date on this document, and print it out for your instructor.
Chapter 12 — Reading Quiz

Read Chapter 12 of *Power Tools for Technical Communication* and answer each of the following. (A multiple-choice version is available at the website for this book.)

1. Explain the difference between *highlighting* and *emphasis*.

2. Chapter 12 cautions you never to use a certain technique for highlighting and emphasis, even though some writers do use them. Which technique is that and why?

3. If you have a situation in which you want to apply highlighting to a full paragraph, what should you do?

4. When should you use all caps as a method of highlighting or emphasis and why?

5. When should you use quotation marks as a method of highlighting or emphasis?

6. Explain what a *highlighting scheme* is and why you’d use it.

7. In word-processing software, explain what a *character style* is and how it can be used to highlight a document?

8. Explain what a *field name* is and what style of highlighting is recommended for fields by Chapter 12.

9. If you are not sure which highlighting to use, what should you do?

10. This chapter states that one form of highlighting is common for examples and user-entered text. Explain which it is.
Chapter 13. Business Communications

This chapter in *Power Tools* introduces students to strategies for writing business communications such as business letters, memos, and e-mail. Included in the chapter are both writing and formatting strategies as well as a brief introduction to creating templates.

Because college students don’t take both a technical communication course and a business communication course, technical-communication teachers often include elements of business communications courses in their syllabi. In terms of writing projects, this means an inquiry, claim, or adjustment letter; a memo or two; or a brief report formatted as a business letter.

In a unit on business communications, consider these goals:

- Know the standard format for business letters and memos.
- Use common content and organizational strategies for business communications in general.
- Know the important elements of the introduction to a business letter, memo, or e-mail.
- Use strategies to give business communications a reader orientation.
- Know how to create templates in a word-processing or desktop-publishing software application.

With so many possibilities for study and projects, planning technical writing courses can be overwhelming. Rather than scheduling a separate unit strictly for business letters, memos, and e-mail, consolidate this unit with something else in your course. For example, proposals, progress reports, and short reports are often formatted as business letters; these units combine nicely with a unit on business communications.

**Teaching Ideas**

Here are some suggestions for things to do in class to get students ready to write business letters, memos, and e-mail:

*Give the chapter reading quiz.* Have students read the chapter and take the reading quiz—either in class or in the lab. Discussing the answers is a good way to get students thinking about the concepts and strategies in this chapter.

*Use the labs.* The labs for this chapter involve developing, formatting, and revising business communications as well as creating templates. Except for the templates, you can do these labs either in a computer lab or in the regular classroom.
**Review business communications.** It’s a good idea to take students on tours through several letters, memos, or e-mails like the ones they will be writing. To make these reviews more effective, put these examples on transparencies.

**Business-communication walk-through.** An interesting thing to do with the class is to “walk through” the phases of planning and writing one of the business communications featured in Chapter 13—or as much of it as possible in a classroom meeting. If you have access to a computer projector, students can watch the letter, memo, or e-mail emerge before their very eyes.
Technical-Writing Lab: Business Communications

In this lab, you’ll get some practice planning and formatting business letters and memos and creating templates. All of the links in the following are available at:

www.io.com/~hcexres/power_tools/business_comms/

Chapter 13 — Reading Quiz

Before this lab, make sure you’ve read Chapter 13 and made a score on the reading quiz for this chapter as required by your instructor. This reading quiz is available at the following web address and can be e-mailed directly to your instructor:

www.io.com/~hcexres/power_tools/business_comms/buscomms_quiz.html

Lab 1 — Create a Business-Letter Template

Most word-processing and desktop-publishing software enables you to create templates which provide standardized formatting and text. Templates save time and make your documents consistent. Go to the following web address, and follow the instructions there for creating a template for a business letter:

www.io.com/~hcexres/power_tools/business_comms/letter_template.html

Put your name and the date on this template document, and print it out for your instructor.

Lab 2 — Create a Memo Template

To get some additional practice creating templates, set up a template for a memo. Go to the following web address, and follow the instructions for creating a memo template:

www.io.com/~hcexres/power_tools/business_comms/memo_template.html

Put your name and the date on this template document, and print it out for your instructor.

Lab 3 — Format a Business Letter

In this lab, you develop and format a business letter from source materials:

1. Go to the following web address, use the text at that address in a business letter you start in your preferred word-processing software:

www.io.com/~hcexres/power_tools/business_comms/letter_format.html

2. Select information for the heading, inside address, date, salutation, and signature block. Select materials for the body sections of this letter.

*Note:* Don’t try to use all of the source materials. Some of it is not appropriate for this letter.

3. Do any final revising of the text to ensure that it flows smoothly and coherently. Be sure to include all formatting appropriate for this letter.
4. Put your name, Business Letter Format, and the date on this document, and print it out for your instructor.

Lab 4 — Format a Memorandum

In this lab, you develop and format a memo from source materials:

1. Go to the following web address, use the text at that address in a memo you start in your preferred word-processing software:
   www.io.com/~hcexres/power_tools/business_comms/memo_format.html

2. Select information for the heading and date. Select materials for the necessary body sections of this memo.
   
   Note: Don’t try to use all of the source materials. Some of it is not appropriate for this letter.

3. Do any final revising of the text to ensure that it flows smoothly and coherently. Be sure to include all formatting appropriate for this memo.

4. Put your name, Memo Format, and the date on this document, and print it out for your instructor.

Lab 5 — Revise a Business Communication

In this lab, you revise a business communication:

1. Go to the following web address, and choose one of the business letters, memos, or e-mails to revise:
   www.io.com/~hcexres/power_tools/business_comms/revisions.html

2. Copy that text into a new document that you start in your preferred word-processing software.

3. Refer to the instructions at that same web address as you revise.

4. Put your name, Business Communication Revision, and the date on this document, and print it out for your instructor.
Project 1 — Inquiry Communication

Using the discussion and examples in Chapter 13, plan and write an inquiry letter, memo, or e-mail. Here are the essential requirements:

1. Find a situation in which you need **expert information**—information that is not otherwise available in published documents. For example, if you are researching information for a technical report, perhaps some information you just cannot find in library resources.

2. Describe the **audience** (the expert) and how you think that audience may react to your inquiry. Attach this audience information to your letter, memo, or e-mail.

3. Write an **unsolicited inquiry**—one in which the recipient has not done anything to encourage inquiries.

4. Keep this inquiry communication to **one page**. Include all **formatting** appropriate to whichever type of communication you write—business letter, memo, or e-mail.

5. Begin with a real **introduction**, with the appropriate characteristics described in Chapter 13.

6. Include **your project information**—who you are, what you are working on, and why you need the information you are requesting. Reassure the recipient that you have investigated print resources thoroughly and have not been able to find answers to your questions.

7. State your **questions** clearly. If possible, use an easy-to-answer format to make the recipient’s job of answering your questions easier. Avoid scattershot information requests such as “send me all information about the Internet.”

8. Offer to pay the recipient for any **expenses** incurred in answering your questions.

9. Express your **gratitude** for any help the recipient can send your way. Think of some way to return the favor, perhaps by sending a copy of your report or acknowledging the recipient.

10. As with all writing projects in this course, use the **standards** of good writing, including punctuation, grammar, usage, and spelling.
Project 2 — Complaint Communication

Using the discussion and examples in Chapter 13, plan and write a complaint letter, memo, or e-mail. Here are the essential requirements:

1. Think of a situation in which you, or someone you know, had an experience with a bad product or service and demanded refund or compensation.

2. Describe the audience (the recipients of your complaint) and how you think that audience may react to your complaint. Attach this audience information to your letter, memo, or e-mail.

3. Keep this complaint communication to one page. Include all formatting appropriate to whichever type of communication you write—business letter, memo, or e-mail.

4. Begin with a real introduction, with the appropriate characteristics described in Chapter 13.

5. In one or more body paragraphs, describe, narrate, or both the problems you had. Provide plenty of specific details such as date of purchase, model numbers, addresses, names of salespersons, cost, and so on.

6. State the compensation you expect and the reasons you believe that request is fair and appropriate.

7. In this communication, maintain a firm, civil, professional tone. Avoid blowing off steam, getting angry, threatening—no matter how justified you believe you are.

8. Support your complaint and your request with evidence such as receipts, warranties, photos, independent estimates, and other such. Indicate these as attachments.

9. As with all writing projects in this course, use the standards of good writing, including punctuation, grammar, usage, and spelling.
**Project 3 — Adjustment Letter**

Using the discussion and examples in Chapter 13, plan and write an adjustment letter, memo, or e-mail. Here are the essential requirements:

1. Put yourself in the position of having to answer a complaint letter, memo, or e-mail. For example, if you wrote a complaint letter, write the answer to it; or trade complaint letters with someone else in your class and write an answer to that student’s complaint.

2. Describe the *audience* (the person with the complaint) and how you think that audience may react to your response. Attach this audience information to your letter, memo, or e-mail.

3. Begin with a real *introduction*, with the appropriate characteristics described in Chapter 13. Remember that a standard way to begin an adjustment letter is to express regrets that the customer has had a problem and express gratitude to the customer for getting in touch.

4. Explain the *circumstances* that caused the problem—from your organization’s point of view. Remember that a common strategy in a “bad news” letter such as this is to state the reasons for refusal first, then state the refusal.

5. Avoid *tone problems* whether you grant or refuse the requested adjustment. If you must reject, maintain a polite professional tone; avoid sounding defensive. If you grant the request, avoid a begrudging tone but at the same time affirm your organization’s integrity and professionalism.

6. State specifically what the *adjustment* is and why. If you cannot fully grant the customer’s request, find some partial or substitute adjustment.

7. In this communication, maintain a *firm, civil, professional tone*. Avoid blowing off steam, getting angry, threatening—no matter how justified you believe you are.

8. As with all writing projects in this course, use the *standards* of good writing, including punctuation, grammar, usage, and spelling.
Chapter 13 — Reading Quiz

Read Chapter 13 of *Power Tools for Technical Communication*, and answer each of the following. (A multiple-choice version is available at the website for this book.)

1. According to Chapter 13, it’s important to establish *context* in a business communication. Explain what context is and where it should be established.

2. Which business-letter format does not include a salutation, using a subject line instead?

3. How should the salutation of a formal business letter be punctuated?

4. Describe the elements that should be in the top portion (header) of second and following pages of formal business letters.

5. Explain the value of templates for business-letter and memo writing.

6. Define the complaint communication.

7. Define the adjustment communication.

8. Describe how you would use the “bad-news-last” strategy to write an adjustment letter.

9. Describe at least three elements that should be included in the introduction of any business communication.

10. Explain what Chapter 13 means by the “reader-first strategy” and provide an example.
Chapter 14. Resumes and Application Letters

This chapter in *Power Tools* introduces students to basic strategies for writing resumes and application letters.

A unit on resumes and application letters is useful for a number of reasons. You get students’ attention: they see learning to write a resume as immediately valuable. They may not have another course that gives them this opportunity. For these reasons, the resume and application letter are good ways to begin the semester. Also, a unit on the resume and application letter says to your students that this course is not just more freshman composition by another name. And finally, this unit enables you to get to know your students—if the traditional get-acquainted memo seems too trite.

In a unit on resumes and application letters, consider these goals:

- Understand the role of resumes and application letters in the employment-application process, and the relationship of the application letter to the resume in that process.
- Know standard business letter format for use in application letters.
- Use common content and organizational strategies in application letters.
- Understand the importance of careful design of resumes: use format to highlight best qualifications, maximize readability and scannability, and lengthen or shorten resumes.
- Understand the importance of detail and action verbs in both the application letter and the resume.

**Study Units & Writing Assignments**

Here are some ideas as to chapters in *Power Tools* that relate to units on resumes and application letters:

- Make sure that students learn about audience analysis (Chapter 19) before or at the beginning of this unit.
- Also make sure that they study the business communications chapter, Chapter 13, so that they know standard format and strategies for business letters.
- Consider having students read the first part of the persuasion chapter, Chapter 6, so that they can see the resume and application letter as persuasive documents and the role of the different appeals in those documents.
- Although you might consider using the chapters on heading, lists, and highlighting (Chapters 7, 8, and 12), those chapters do not directly address resumes.

The following pages provide different lesson plans for resumes and application letters. Just yank out the chapters you’ve already covered earlier in the semester:
### Resume & Application Letter Unit

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Reading Material</th>
<th>Additional Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter 14</td>
<td>Read this chapter on resumes and application letters.</td>
<td>Take the reading quiz. Do labs 1, 2, 3, and 4 (in the following pages).</td>
</tr>
<tr>
<td>Chapter 6</td>
<td>Read the section on persuasion only.</td>
<td>Take the reading quiz. Do labs 1 and 2.</td>
</tr>
<tr>
<td>Chapter 13</td>
<td>Read the section in this chapter on business letters.</td>
<td>Take the reading quiz. Do labs 1, 2, and 3.</td>
</tr>
<tr>
<td>Chapter 17</td>
<td>For students who plan to do an online version of their resume.</td>
<td></td>
</tr>
<tr>
<td>Chapter 19</td>
<td>Read this chapter on audience analysis.</td>
<td>Take the reading quiz. Do as many of exercises 1 through 5 in chapter 19 as you have time for.</td>
</tr>
<tr>
<td>Chapter 8</td>
<td>Read this chapter on numbered, bulleted, and other kinds of lists.</td>
<td>Take the reading quiz. Do labs 1, 2, and 3.</td>
</tr>
<tr>
<td></td>
<td><em>All students</em>: do the standard resume and application letter.</td>
<td>Do project 1 and 2 (in the following pages).</td>
</tr>
<tr>
<td></td>
<td><em>Advanced students</em>: for those in your class who need a challenge.</td>
<td>Do project 3 (in the following pages).</td>
</tr>
</tbody>
</table>

### Teaching Ideas

Here are some suggestions for things to do in class to get students ready to write resumes and application letters:

*Give the chapter reading quiz.* Have students read the chapter and take the reading quiz—either in class or in the lab. Discussing the answers is a good way to get students thinking about the concepts and strategies in this chapter.

*Use the labs.* The labs for this chapter involve evaluating and building resumes and application letters (from sources materials). With some ingenuity, you can do these labs either in a computer lab or in the regular classroom.

*Analyzing job announcements.* Have students find job announcements, and bring them to class. In class, get students to:
  - identify exactly what the job announcement requests: resume, application letter, or other.
  - analyze the audience implied in those job announcements.
  - use the job announcements to plan the contents and organization of resumes and application letters.
• brainstorm how to compensate for lack of experience.

Analyzing existing application letters. To make students aware of the content, organization, format, and style of application letters, take them on a tour of several in class. Use the examples in Chapter 14, showing students how:

• background information can be divided into education and experience (reverse-chronological approach) or into different areas of background (functional approach).
• the introductory paragraph needs to be brief but accomplish several essential tasks.
• specific detail is essential in application letters.
• self-praise does not work in these letters.

You can find addition examples of application letters at www.io.com/~hcexres/power_tools/examples.

Analyzing existing resumes. Also, take students on a tour of one or more resumes in class. Using the examples in Chapter 14, show students how:

• information about background and qualifications is presented in separate sections with their own headings.
• specific detail is presented in the background and qualifications sections.
• “highlights” sections are useful as a quick summary just below the heading portion of a resume.
• typographical effects such as bold, italics, underscores, alternate fonts, and larger type sizes are used for emphasis, but consistently and with restraint.
• reverse-chronological order and predicate-only sentences are commonly used in resumes.

You can find addition examples of resumes at www.io.com/~hcexres/power_tools/examples.

Resume walk-through. An interesting thing to do with the class is to “walk through” the phases of planning and writing a resume—or as much of it as possible in a classroom meeting. Use a computer projector so that students can watch the resume emerge before their very eyes. Start with a simple job announcement, or make one up with the class.

Application letter walk-through. Also try doing a “walk through” for the application letter. Again, use a computer projector. Have students plan the introduction, decide how to present the education and experience material, and consider the contents of the final paragraph. Get them to try the functional approach as well as the reverse-chronological approach.
Technical-Writing Lab: Application Letters & Resumes

In this lab, you’ll get some practice planning and formatting application letters and resumes. All of the links in the following are available at:

www.io.com/~hcexres/power_tools/job_search/

Chapter 14 — Reading Quiz

Before this lab, make sure you’ve read Chapter 14 and made a score on the reading quiz for this chapter as required by your instructor. This reading quiz is available at the following web address and can be e-mailed directly to your instructor:

www.io.com/~hcexres/power_tools/job_search/jobsearch_quiz.html

Lab 1 — Evaluate Resumes

It’s useful to see resumes the way that employers see them—in a big stack. To understand how important a well-designed resume can be in that context, go to the following web address, study the example resumes there, and evaluate them:

www.io.com/~hcexres/power_tools/job_search/eval_resumes.html

Lab 2 — Build and Format a Resume

In this lab, you build a resume from background information on an individual:

1. Go to the following web address, use the text at that address in a resume document you start in your preferred word-processing software:

   www.io.com/~hcexres/power_tools/job_search/resume_info.html

2. Study the background information carefully, selecting details for experience and education sections, add headings, and developing the rest of the resume as necessary. (Use either the reverse-chronological or functional organization.)

3. Be sure to include all formatting appropriate to a formal resume.

4. Put your name, Resume Format, and the date on this document, and print it out for your instructor.

Lab 3 — Evaluate Application Letters

It’s also useful to see application letters the way that employers see them—another big stack. To see how important a well-written letter can be in that context, go to the following web address, study the example resumes there, and evaluate them:

www.io.com/~hcexres/power_tools/description/eval_appletters.html
Lab 4 — Format an Application Letter

In this lab, you develop an application letter from source materials:

1. Go to the following web address, use the text at that address in an application-letter document you start in your preferred word-processing software:

   www.io.com/~hcexres/power_tools/job_search/appletter_info.html

2. Select information for the heading, inside address, and date. Select materials for the necessary body sections of this application letter. Study the background information carefully, select details for experience and education sections, add headings, and develop the rest of the application letter as necessary.

   Note: Don’t try to use all of the source materials. Some of it is not appropriate for this letter.

3. Do any final revising of the text to ensure that it flows smoothly and coherently. Be sure to include all formatting appropriate to a formal application letter.

4. Put your name, Application Letter Format, and the date on this document, and print it out for your instructor.
**Project 1 — Resume**

Using the discussion and examples in Chapter 14, plan and write a resume. Here are the essential requirements:

1. Find a *job announcement* in a newspaper, magazine, bulletin board, or on the Internet. Copy this announcement onto a separate page that you attach to your resume.

2. Describe the *audience* and what that audience will be looking for in your job application. Attach this audience information to the end of your resume.

3. At the top of this resume, include the appropriate *heading* information such as your name, address, phone number, e-mail, title, and other such possibilities.

4. Consider including a *summary of highlights* section, just below the heading. Remember that a highlights section provides a quick summary of your most important qualifications.

5. Present details about your *qualifications*—background, education, training, military and work experience, and other areas as relevant to the employment you are seeking.

6. Use *organization and format* to present your information as effectively as possible.

7. Include plenty of *specific details and examples*. Avoid generalities and self-praise.

8. Keep this resume to *one page*. Include all formatting appropriate to a formal resume.

9. Design this resume so that it contains plenty of details but remains easily *scannable*. Keep the material balanced and symmetrical on the page. Provide plenty of white space.

10. Use *typographical effects* (such as italics, bold, alternate fonts) in a careful, consistent, and restrained manner. Avoid creating a busy-looking resume that no one wants to read.

11. As with all writing projects in this course, use the *standards* of good writing, including punctuation, grammar, usage, and spelling.
Project 2 — Application Letter

Using the discussion and examples in Chapter 14, plan and write an application letter. Here are the essential requirements:

1. Find a job announcement in a newspaper, magazine, bulletin board, or on the Internet. Copy this announcement onto a separate page that you attach to your application letter.

2. Describe the audience and what that audience will be looking for in your job application. Attach this audience information to the end of your application letter.

3. At the top of this application letter, include a standard heading, inside address, and date.

4. Include a standard salutation in which you solve the TO WHOM IT MAY CONCERN problem.

5. Start with an introduction paragraph that includes the expected information and that does something to draw the reader into the rest of the letter.

6. Present highlights of your qualifications that you select carefully to show how you are qualified for the employment you are seeking.

7. Use an organizational approach that presents your information as effectively as possible.

8. Include plenty of specific details and examples. Avoid generalities and self-praise.

9. Keep this application letter to one page. Include all formatting appropriate to a formal application letter.

10. Make the tone of this letter expressive of your personality; sound positive, bright, and interested; but avoid the extremes such as stiff, casual, nonchalant, overly eager, overly formal, and so on.

11. As with all writing projects in this course, use the standards of good writing, including punctuation, grammar, usage, and spelling.
Project 3 — Online Resume

Using the discussion and examples in Chapter 14 and in Chapter 17, plan and write a resume for online presentation, or convert an existing resume for online presentation. Here are the essential requirements:

1. Find a job announcement in a newspaper, magazine, bulletin board, or on the Internet. Copy this announcement onto a separate page that you attach to your resume.

2. Describe the audience and what that audience will be looking for in your job application. Attach this audience information to the end of your resume.

3. Design the navigation of this online resume so that readers can quickly access the sections they want. Use frames, menus, image maps, or other techniques.

4. Provide hypertext links to more detailed information such as examples of work projects or detailed descriptions of job responsibilities. Design so that readers can choose to see greater detail; don’t force them to wade through it.

5. At the main entry point of this online resume, include the appropriate heading information such as your name, address, phone number, e-mail, title, and other such possibilities.

6. Also at a main entry point, consider including a summary of highlights section, just below the heading. Remember that a highlights section provides a quick summary of your most important qualifications.

7. Present details about your qualifications—background, education, training, military and work experience, and other areas as relevant to the employment you are seeking.

8. Use organization and format to present your information as effectively as possible.

9. Include plenty of specific details and examples. Avoid generalities and self-praise.

10. Design this resume so that it contains plenty of details but remains easily scannable. Keep the material balanced and symmetrical on the page. Provide plenty of white space.

11. Use typographical effects (such as italics, bold, alternate fonts) in a careful, consistent, and restrained manner. Avoid creating a busy-looking resume no one wants to read.

12. As with all writing projects in this course, use the standards of good writing, including punctuation, grammar, usage, and spelling.
Chapter 14 — Reading Quiz

Read Chapter 14 of Power Tools for Technical Communication, and answer each of the following. (A multiple-choice version is available at the website for this book.)

1. Explain why application letters and resumes are essentially persuasive.

2. Explain the difference between application letters and resumes, in particular the different roles they play.

3. Explain the difference between application letters and cover letters. Which one is the focus of Chapter 14?

4. What is Chapter 14’s name for the brief, bulleted-list summary of a job applicant’s most important qualifications, located toward the top of a resume? Explain why it is useful.

5. You can present your background in two separate sections, one for employment and another for education. Describe another way to present background information in a resume.

6. Explain the difference between a standard print resume and a scannable resume.

7. Describe what Chapter 14 asserts should be included in the first paragraph of an application letter.

8. Explain what’s wrong with saying something like “I am very team-oriented” or “I work well under pressure” in an application letter.

9. Explain what’s wrong with saying something like “I currently manage a customer-support group with high throughput of customer calls” in an application letter.

10. Ordinarily, what is the objective of the application letter and resume?
Chapter 15. Formal Reports: Design, Format, Abstracts

This chapter in Power Tools introduces students to standard formats for reports and includes a section on writing executive summaries.

In most technical-writing courses, students produce a formal, researched technical report, which is due toward the end of the semester. Few students have written a document that long, and fewer still have written a document with so many formatting requirements. For that reason, it’s not a bad idea to give them some unformatted text to shape into a formal report. You can have them do this formatting work in a computer lab during those weeks when they are otherwise hard at work on the research and rough drafting phases of their own report projects.

In a unit on report format and executive summaries, consider these goals:

- Know the sequence of components contained in a typical report.
- Be able to imitate the format and style of a report design: margins, fonts, alignment, indentation, pagination, numbering, capitalization, punctuation, highlighting—everything.
- Create templates in a word-processing application so that report writing and formatting will be more efficient and consistent.
- Understand the functions of abstracts and executive summaries in reports.
- Know some strategies for creating abstracts and executive summaries.

When students reach this chapter, they should have already studied the chapters in Part 2. They should have been thoroughly introduced to headings, lists, notices, tables, charts, graphs, figures, and highlighting. All of these “document design” tools come together in a formal technical report.

Teaching Ideas

Here are some suggestions for things to do in class to help students learn about report format and abstracts:

Give the chapter reading quiz. Have students read the chapter and take the reading quiz—either in class or in the lab. Discussing the answers is a good way to get students thinking about the concepts and strategies in this chapter.

Use the labs. The labs for this chapter involve formatting reports and creating templates for use in writing and formatting reports. Except for the templates, you can do these labs either in a computer lab or in the regular classroom.
**Report design walk-through.** It’s essential to walk students through the format and style of a report—page by page. Point out all the details: margins, fonts, page numbers, capitalization of titles and headings, use of bold and italics, page breaks, indentation, and so on. Step students through each of the components of a formal report, starting with the covers and cover label and working all the way through to the appendixes. Emphasize how each major section starts on a new page. Discuss the different ways cover pages can be created, and discuss the different kinds of binding that are available. If possible, hand out a set of example pages from a report on which they can take notes. Most students are understandably overwhelmed by all this detail. That’s why scheduling a series of labs in which they shape a formal report from unformatted text is a good idea.

**Executive summary walk-through.** To introduce students to executive summaries, step them through the process of summarizing a short report. Show the report using transparencies, and get students to identify the essential information and develop a summary of it.
Technical-Writing Lab: Report Format & Abstracts

In this lab, you’ll get some practice formatting reports and creating executive summaries. All of the links in the following are available at:

www.io.com/~hcexres/power_tools/report_format/

Chapter 15 — Reading Quiz

Before this lab, make sure you’ve read Chapter 15 and made a score on the reading quiz for this chapter as required by your instructor. This reading quiz is available at the following web address and can be e-mailed directly to your instructor:

www.io.com/~hcexres/power_tools/report_format/reformat_quiz.html

Lab 1 — Format a Short Report

In this lab, you set up a short report using unformatted text:

1. Go to the following web address, and copy the text at that address into a new document you start in your preferred word-processing software:
   www.io.com/~hcexres/power_tools/report_format/shortreport_format.html

2. Study the text carefully to determine what the title should be and where to place headings, lists, tables, and figures.

3. Use standard margins and page numbering. (See the instructions at the preceding web address for details.)

4. Put your name as the author of the report, and print it out for your instructor.

Lab 2 — Create a Report Template

Templates are useful tools that make your report writing faster and more consistent. See Chapter 13 for an introduction to creating templates. In this lab, you create a template—or rather a set of templates—for a formal report:

1. Go to the following web address, and follow the instructions at that address for creating a template in your preferred word-processing software:

   Note: Instructions for templates in Microsoft Word, Corel WordPerfect, Lotus Word Pro, and Adobe FrameMaker are available at the web site.

2. When you have finished the templates, print out several test pages as requested in the instructions at the preceding web address.

3. Put your name, Template Test Pages, and date on the first of these test pages, and print them out for your instructor.
Lab 3 — Format a Formal Report

For heavy-duty report writing, you’ll appreciate having templates. They make your work more efficient, consistent, and professional. In this lab, you can start with the template you created in the previous lab, download an existing one, or (if you insist) format the text from scratch. In this lab, you take on a much larger formatting project: you format all the pieces of a formal report (cover page, title page, table of contents, list of figures, body text, appendices).

1. Go to the following web address, and copy the text at that address into a new document you start in your preferred word-processing software:

   www.io.com/~hcexres/power_tools/report_format/formalreport_format.html

2. For templates, you have several choices:
   • If you want to use an existing template, return to the preceding web address and copy the template that matches your preferred word-processing software.
   • If you created your own template in the preceding lab, use the instructions at the preceding web address to modify that template and create additional ones.
   • If you format from scratch, use the specifications at the preceding web address.

3. Whether you use a template or format manually, design the text so that all the required report components are included and formatted according to the specifications at the preceding web address.

4. Whether you use a template or format manually, design the text so that paragraphs, lists, tables, figures, and other such elements are formatted according to the specifications at the preceding web address.

5. Put your name as the author of the report, and print it out for your instructor.

Lab 4 — Write an Executive Summary

In this lab, you write an executive summary using the text of an existing report:

1. Go to the following web address, and select one of the reports:

   www.io.com/~hcexres/power_tools/report_format/exec_summary.html

2. Study the report carefully for its key points, concepts, and facts.

3. Summarize the key information in each major section of the report.

4. Bring all the pieces of this summary together, and make it read smoothly and coherently. Delete as much unnecessary text as you can without eliminating important information and without harming the readability of this summary.

5. Put your name, Executive Summary, and the date on this document, and print it out for your instructor.
Project 1 — Formal Report Formatting

For heavy-duty report writing, you’ll appreciate having templates. They make your work more efficient, consistent, and professional. In this project, you can start with the template you created in one of the labs, download an existing one, or (if you insist) format the text from scratch. In this project, you format all the pieces of a formal report (cover page, title page, table of contents, list of figures, body text, appendixes).

1. Go to the following web address, and copy the text at that address into a new document you start in your preferred word-processing software:

   www.io.com/~hcexres/power_tools/report_format/formalreport_format.html

2. For templates, you have several choices:
   - If you want to use an existing template, return to the preceding web address and copy the template that matches your preferred word-processing software.
   - If you created your own template in the preceding lab, use the instructions at the preceding web address to modify that template and create additional ones
   - If you format from scratch, use the specifications at the preceding web address.

3. Whether you use a template or format manually, design the text so that all the required report components are included and formatted according to the specifications at the preceding web address.

4. Whether you use a template or format manually, design the text so that paragraphs, lists, tables, figures, and other such elements are formatted according to the specifications at the preceding web address.

5. Put your name as the author of the report, and print it out for your instructor.

6. Check with your instructor to see whether cover and binding are required.
**Project 2 — Executive Summary & Abstract**

In this project, you write an executive summary using the text of an existing report:

1. Go to the following web address, and select one of the reports:
   
   www.io.com/~hcexres/power_tools/report_format/exec_summary.html

2. Study the report carefully for its key points, concepts, and facts.

3. Summarize the key information in each major section of the report.

4. Bring all the pieces of this summary together, and make it read smoothly and coherently.

5. Delete as much unnecessary text as you can without eliminating important information and without harming the readability of this summary.

6. Put your name, Executive Summary, and the date on this document, and print it out for your instructor.
Chapter 15 — Reading Quiz

Read Chapter 15 of *Power Tools for Technical Communication* and answer each of the following. (A multiple-choice version is available at the website for this book.)

1. List the contents of the title page of a formal report, as presented in Chapter 15, and describe the purpose and content of the summary that is commonly included on the title page.

2. Describe the executive organizational approach and its usefulness.

3. Describe what Chapter 15 recommends as the best types of bindings for formal technical reports.

4. Describe how the transmittal letter is included in a formal technical report.

5. Explain the difference between the cover page and title page in terms of content and format.

6. Explain the differences between the informative abstract and executive summary, as presented in Chapter 15.

7. Describe the three overall formats (or “packaging”) you can use for reports and the situations in which you’d want to use each one.

8. Describe the contents of the transmittal letter in a formal technical report.


10. According to Chapter 15, one kind of font is used for body text and another for headings. What are those kinds of fonts?
Chapter 16. Oral Reports: Preparation, Visuals, Delivery

This chapter in *Power Tools* introduces students to strategies for preparing oral presentations, including the visuals for those presentations. The chapter also contains an oral-report evaluation form and an introduction to using presentation software (such as Microsoft Powerpoint and Lotus Freelance Graphics) in oral reports.

In a unit on oral reporting, consider these goals:

- Know three methods to prepare for an oral report.
- Know the four important elements to include in an introduction to an oral report.
- Know the different types of visuals that can be used in an oral report, and have some ideas for their content.
- Know how to identify the infrastructure of an oral-report project.
- Understand what presentation software is and how it can be effective in an oral report.
- Be able to use a script for an oral report without reading from it directly.
- Understand the concept of verbal headings and use them in oral reports.

With so many possibilities for study and projects, planning technical writing courses can be overwhelming. Rather than scheduling a separate unit strictly for the oral report, try to consolidate this unit with something else in your course. For example, proposals, progress reports, and short reports can be presented orally. Also, students can orally present an overview of their formal, researched technical report.

Teaching Ideas

Here are some suggestions for things to do in class to get students ready for oral reports:

*Give the chapter reading quiz.* Have students read the chapter and take the reading quiz—either in class or in the lab. Discussing the answers is a good way to get students thinking about the concepts and strategies in this chapter.

*Use the labs.* The labs for this chapter involve planning, analyzing, and evaluating oral reports, as well as exploring the possibilities of presentation software. Except for presentation software, you can also do these labs in the regular classroom.
Plan visuals for oral reports. Students often have trouble thinking of visuals for their oral reports. To open up the possibilities, present several oral-report projects and get discussion going on the visuals that could be used in each.

Evaluate oral reports. Bring video tapes of oral reports to class, and ask students to evaluate each report using the form at the end of Chapter 16. It may take some cleverness on your part to find videotaped oral reports. You might try taping city-council meetings that are shown on local-access television. Some instructors videotape their students’ oral reports. You can use these in subsequent semesters, with the individual students’ permission of course.

Explore presentation software possibilities. Considering how commonly it is used in the workplace, find a way to explore how presentation software (such as Microsoft Powerpoint and Lotus Freelance Graphics) can be used in oral reports. Show one or two such presentations to your class to start them thinking about the possibilities. Use the related lab to give them an introduction to using presentation software.

Oral report walk-through. A good idea is to go through the process of planning an oral report, including the visuals, with your class. Start with the requirements of a hypothetical (or real) project; analyze the audience, purpose, and situation; find the infrastructure; outline the presentation; identify visuals to use; and think carefully about the introduction and conclusion.
In this lab, you’ll get some practice planning and evaluation oral reports. All of the links in the following are available at:

www.io.com/~hcexres/power_tools/oral_reports/

**Chapter 16 — Reading Quiz**

Before this lab, make sure you’ve read Chapter 16 and made a score on the reading quiz for this chapter as required by your instructor. This reading quiz is available at the following web address and can be e-mailed directly to your instructor:

www.io.com/~hcexres/power_tools/oral_reports/oralrep_quiz.html

**Lab 1 — Analyze Oral Reports**

Chapter 16 encourages you to incorporate certain important features into your oral reports. Go to this web address, and identify those features in the oral-report scripts there:

www.io.com/~hcexres/power_tools/oral_reports/analysis.html

**Lab 2 — Evaluate an Oral Report**

You can learn a lot about oral reporting by listening to others and evaluating them. Find one or more oral reports to evaluate: for example, the board meeting of any association or council (city council or PTA meeting). Check local-access television for televised meetings where brief oral reports are given.

Use copies of the oral-report evaluation form in Chapter 16. Put your name, a brief description of the oral report, and the date on each evaluation form.

**Lab 3 — Present a Printed Report Orally**

Presenting a report orally is quite different from presenting it in printed form. To get a sense of the differences and to practice preparing oral reports, go to the following web address and follow the instructions there:

www.io.com/~hcexres/power_tools/oral_reports/print_oral.html

**Lab 4 — Use Presentation Software**

In the business and professional world, oral reports often use presentation software such as Microsoft Powerpoint and Lotus Freelance Graphics. In this lab, you create a software presentation using the script and visuals of an oral report. See the following web address for the requirements, text, and graphics for this project:

www.io.com/~hcexres/power_tools/oral_reports/ppt_report.html
Project 1 — Oral Report

Using the discussion and examples in Chapter 16, plan and present an oral report. Here are the essential requirements:

1. Use one of the following ideas for an oral report:
   - Introduce your technical report and present the highlights from it.
   - Convert a brief written report to an oral report.
   - Think of an audience or situation for which oral reports are routinely given.
   - Find a proposal or progress report you could present orally.

2. Describe the audience and situation for this oral report. Explain these details to the class before you begin your oral report.

3. Plan your oral report to last as close to 7 minutes as possible.

4. Use any presentation method you prefer: cue cards, outlines, or script. If you use a script, just glance at it; read directly from it only in limited amounts; maintain eye contact with your audience.

5. Start with a good introduction, one that identifies the topic and purpose, generates some interest, and provides an overview of what’s to follow.

6. Include at least one visual in your oral report. Remember to refer to it and explain it during your report.

7. Take special care to make technical explanations understandable for nonspecialists.

8. Use verbal headings during your oral report to indicate when you move from one part of your report to the next.

9. Plan the conclusion to your oral report carefully. Don’t just trail off into a mumble.

10. Make sure that the volume and pace of your delivery of your oral report are right for the audience and situation. Keep nervous verbal mannerisms (such as uh, you know, or okay) and gestures under control. (And no slouching!)
Project 2 — Oral Report with Presentation Software

Using the discussion and examples in Chapter 16, plan and present an oral report in which you use presentation software as an essential component. Here are the requirements:

1. Use one of the following ideas for an oral report:
   - Introduce your technical report and present the highlights from it.
   - Convert a brief written report to an oral report.
   - Think of an audience or situation for which oral reports are routinely given.
   - Find a proposal or progress report you could present orally.

2. Describe the audience and situation for this oral report. Explain these details to the class before you begin your oral report.

3. Plan your oral report to last as close to 7 minutes as possible.

4. Include all of your visuals in your presentation-software document. Also in that same presentation-software document, create screens listing the main points or facts of each part of your oral report. Do not import the full text of your oral report into the presentation-software document.

5. Start with a good introduction, one that identifies the topic and purpose, generates some interest, and provides an overview of what’s to follow.

6. Interact with your presentation-software document: use it as notes or cue cards to remind yourself of what to talk about. Maintain eye contact with your audience; don’t read directly from your presentation-software document.

7. Take special care to make technical explanations understandable for nonspecialists.

8. Use verbal headings during your oral report to indicate when you move from one part of your report to the next.

9. Plan the conclusion to your oral report carefully. Don’t just trail off into a mumble.

10. Make sure that the volume and pace of your delivery of your oral report are right for the audience and situation. Keep nervous verbal mannerisms (such as uh, you know, or okay) and gestures under control. (And no slouching!)
Chapter 16 — Reading Quiz

Read Chapter 16 of *Power Tools for Technical Communication*, and answer each of the following. (A multiple-choice version is available at the website for this book.)

1. Explain why technical writing courses often contain a unit on oral reports.

2. Explain what is the one thing you want to avoid if you use a script to help in your delivery of an oral report.

3. Explain what Chapter 16 means by “finding the infrastructure” when you deliver an oral report.

4. Describe four important elements to include in the introduction to an oral report.

5. Describe several possibilities for visuals that can be used in oral reports.

6. Chapter 16 mentions something called *verbal headings*. Explain what those are and how they function in an oral report.

7. Explain what is *presentation software* and how it can be useful in oral reports.

8. Explain what Chapter 16 means by *transparency handouts* and how they can be useful in an oral report.

9. Explain why you cannot simply read a written report for an oral report. What must you do to the written report to make it effective for oral presentation?

10. Chapter 16 emphasizes a certain way of handling visuals in an oral report. What is that?
Chapter 17. Web Pages: Hypertext and HTML

This chapter in *Power Tools* introduces students to the concept of hypertext, shows them how to create simple web pages, and then walks them through the conversion of a printed report to a web site (a related set of linked web pages).

Here are some goals students should strive for in this chapter:

- Know how to create simple web pages using HTML tags.
- Know how to link web pages hypertextually.
- Understand what “plain text files” are, how to create them, and why they are necessary when creating web pages.
- Understand what the function of frames is in web pages and how to create them.
- Know how to convert a print document into a hypertext.
- Understand the functions of the basic “navigation” tools in a hypertext—chunks, menus, submenus, spot links, generic links, and related-information links.

Teaching Ideas

Here are some ideas for classroom activities to get your students introduced to the idea of hypertext and the process of creating web pages with HTML:

*Give the chapter reading quiz.* Have students read the chapter and take the reading quiz—either in class or in the lab. Discussing the answers is a good way to get students thinking about the concepts and strategies in this chapter.

*Use the labs.* The labs for this chapter involve analyzing and diagramming a web site; creating, linking, and formatting simple web pages; and converting a print document into a web site.

*Create a hypertext mockup.* Ask students to find a report they have written, photocopy one out of a technical journal, or use a report that you hand out to them. Bring it to class and have them create a paper mockup of a hypertext for that document:

1. Chunk the report or article by cutting out the various sections.
2. Create the main-entry point and main menu by writing the links and other information on separate sheets of paper.
3. Write the standard links at the bottom or top of each of the chunks.
4. Write related-information sections at the bottom of the chunks as necessary.
5. Find some place to tape these chunks—for example, on a white board or on wrapping paper that you then tape onto a wall.

6. Draw lines to connect all the links to their targets.

7. Arrange the chunks similar to the ones shown in Chapter 17.

This exercise can be a lot of fun for the class, but it can become quite confusing. An alternative is to hand out one document to everybody in the class and go through the process together, with you the instructor directing students what to do.

Web site walk-through. Try staging a “walk-through” with your class of the phases of planning and writing a hypertext such as might be found on the World Wide Web. Start by identifying and analyzing the audience, situation, and purpose; outlining and “chunking” the contents; designing the menus and submenus; considering spot links, generic links, and related-information links.
Technical-Writing Lab — Hypertext and HTML

In this lab, you’ll get some practice creating and linking web pages using HTML tags (rather than an HTML editor which does it all for you but poorly). You also get some practice with the design and format of web pages. All of the links in the following are available at:

www.io.com/~hcexres/power_tools/hyperweb/

Chapter 17 — Reading Quiz

Before this lab, make sure you’ve read Chapter 17 and made a score on the reading quiz for this chapter as required by your instructor. This reading quiz is available at the following web address and can be e-mailed directly to your instructor:

www.io.com/~hcexres/power_tools/hyperweb/hyperweb_quiz.html

Lab 1 — Analyze a Web Site

In this exercise, you find a web site and diagram it:

1. Find a web site that has multiple "chunks" and other features as discussed in the section on hypertext in Chapter 17.

2. Create a diagram of the hypertext at that web site similar to the ones shown in Chapter 17.

3. Put your name, Web Site Diagram, and the date on this document, and print it out for your instructor.

Lab 2 — Create Simple Web Pages

In this exercise, you create two web pages using HTML tags:

1. Using a simple text editor or web-page editor of your choice, create a simple web page like the one shown in Chapter 17 entitled “My First Web Page.” Between the <TITLE> and </TITLE> tags and between the <H1> and </H1> tags, substitute Simple Web Page 1.

2. Go to the following web address, copy the specified text at that address, and paste it into the web page you just started:

www.io.com/~hcexres/power_tools/hyperweb/html_pages.html

3. Create another simple web page. This time, substitute Simple Web Page 2 between the <TITLE> and </TITLE> tags and between the <H1> and </H1> tags.

4. Copy the specified text at the previous web address, and paste it into this second web page you just started.
5. Follow the instructions at the previous web address, and format and link the two web pages accordingly.

6. Put your name, Basic Web Pages, and the date on both pages, and print them out for your instructor.

**Lab 3 — Create Web Pages with Frames**

In this exercise, you create three web pages that use frames:

1. Using a simple text editor or web-page editor of your choice, create a simple web page like the one shown in Chapter 17 entitled “My First Web Page.” Between the `<TITLE>` and `</TITLE>` tags and between the `<H1>` and `</H1>` tags, substitute Frame Web Page 1.

2. Go to the following web address, copy the specified text at that address, and paste it into the web page you just started:
   
   www.io.com/~hcexres/power_tools/hyperweb/frames.html

3. Copy the specified text at that address, and paste it into the web page you just started.

4. Create another simple web page. This time, substitute Frame Web Page 2 between the `<TITLE>` and `</TITLE>` tags and between the `<H1>` and `</H1>` tags.

5. Copy the specified text at the web address, and paste it into this second web page.

6. Create one more web page. This time, substitute Frame Index Web Page between the `<TITLE>` and `</TITLE>` tags.

7. Copy the specified text at the web address, and paste it into this third web page.

8. Follow the instructions at the web address, and format and link these web pages accordingly.

9. Put your name, Frame Web Pages, and the date on all three pages, and print them out for your instructor.

**Lab 4 — Design Your Own Web Pages**

In this exercise, you use unformatted text to design your own set of web pages:

1. Go to the following web address, copy the specified text at that address, and paste it into a document:

   www.io.com/~hcexres/power_tools/hyperweb/website.html

2. Using the steps presented in Chapter 17, “chunk” the information into separate files, link the files, add other navigation (such as menus and generic links), and format the text (create bulleted or numbered lists, headings, tables, as necessary).

3. Put your name, Web Site, and the date on all these pages, and print them out for your instructor.
Project 1 — Online Conversion of a Print Document

In this project, you convert a report you have written into one or more web pages. If you haven’t written a report suitable for this project, go to the following web address and select one of the documents there:

www.io.com/~hcexres/power_tools/hyperweb/project.html

Here are the essential requirements for this project:

1. Chunk the text into appropriate segments.

2. Link the chunks of the document. Be sure to link to areas within the chunks, not just to the top.

3. Include menus, generic links, spot links, and other navigational aids. (Frames and image maps are optional.)

4. Download the graphics for this project, and display them at the appropriate points in the files.

5. Format the text with headings, lists, tables, illustrations, and other such elements as appropriate.

6. Include your name and date somewhere in this web site, and make it available to your instructor.

7. As with all writing projects in this course, use the standards of good writing, including punctuation, grammar, usage, and spelling.

Note: To do this project, you need to have studied not only Chapter 17 but also Chapters 7 (headings), 8 (lists), 10 (tables, graphs, charts), 11 (illustrations), and 12 (highlighting).
Project 2 — Web Site Development

In this project, you write a document directly as one or more web pages.

Just about any of the projects discussed in Part 1 of Power Tools will work as long as they are well over a page. Unless your instructor specifies a project, consider using the resume, background report, recommendation report, policies and procedures, primary research report, or instructions.

Here are the essential requirements for this project:

1. Study the Part 1 chapter on the type of project you’ve chosen; apply all the guidelines that are stated there. (Ask your instructor for the requirements for the type of project you are doing.)
2. Plan or outline this project as a set of “chunks,” which will be separate files.
3. Link the chunks of the document. Be sure to link to areas within the chunks, not just to the top.
4. Include menus, generic links, spot links, and other navigational aids. (Frames and image maps are optional.)
5. Use graphics in this project; link to them at the appropriate points in the files.
6. Use headings, lists, tables, illustrations, and other such elements as appropriate.
7. Include your name and date somewhere in this web site, and make it available to your instructor.
8. As with all writing projects in this course, use the standards of good writing, including punctuation, grammar, usage, and spelling.

Note: To do this project, you need to have studied not only Chapter 17 but also Chapters 7 (headings), 8 (lists), 10 (tables, graphs, charts), 11 (illustrations), and 12 (highlighting).
Chapter 17 — Reading Quiz

Read Chapter 17 of *Power Tools for Technical Communication*, and answer each of the following. (A multiple-choice version is available at the website for this book.)

1. Explain what file names for web pages must end with and why.

2. Describe the special functions that *frames* bring to web pages.

3. Chapter 17 highly recommends one particular use of frames in web pages. Describe that use.

4. Explain why can’t you use software such as Microsoft Word, Corel WordPerfect, or Lotus Word Pro to create Web pages.

5. Explain what is meant by the term *hypertext* as it is discussed in Chapter 17.

6. Chapter 17 refers to *spot links*. Explain the meaning of that term.

7. Explain what Chapter 17 recommends as the first thing to do when you are converting an existing printed document to hypertext.

8. Chapter 17 refers to *menus*. Explain the meaning of that term.

9. State the term used in Chapter 17 to refer to the entire system of tools that readers use to find their way around in a hypertext. Describe the tools referred to by that term.

10. Chapter 17 refers to *generic links*. Explain the meaning of that term.
Chapter 18 — Reviewing & Revision

This chapter in *Power Tools* provides students with an overall strategy for reviewing other students’ work and reviewing and revising their own. This chapter brings together nearly all the chapters in *Power Tools* into a unified, coordinated system for students to use in the reviewing and revising stage of their writing process.

The chapter has a dual purpose: to give students a system they can use to review other students’ work; and to give them a system they can use to review their own. If students can develop some skills reviewing others’ work, they are likely to become better reviewers of their own.

In this unit of reviewing and revising, consider these goals:

- Understand the difference between reviewing and revising, and understand the importance of reviewing skills in the modern workplace.
- Know why the “top–down” approach to reviewing and revising is the most effective and logical.
- Know how to use the three-pass approach to reviewing.
- Know how to write a review-summary memo that describes all levels of problems, provides examples, suggests revision, and does all that tactfully.

**Teaching Ideas**

A unit on reviewing and revising summarizes practically everything in a technical-writing course. For that reason, it’s a good one to save for the last part of the semester. In some courses, the final three weeks of semester are reserved for students to work on their formal technical reports. While some teachers make the class meetings during those weeks “work sessions” (meaning optional attendance), a useful strategy is to continue holding required class meetings in which you practice reviewing-revising strategies. Doing so not only gives students time to practice those strategies, but also gives you a chance to show them the common format and style of reports and the typical problems that you look for. Here are some ideas for this unit—or this period of your semester:

*Give the chapter reading quiz.* Have students read the chapter and take the reading quiz—either in class or in the lab. Discussing the answers is a good way to get students thinking about the concepts and strategies in this chapter.

*Use the labs.* The labs for this chapter involve reviewing and revising document excerpts that have problems at the various levels of review. For example, the first-pass documents for review have high-level revision problems. You can do these labs either in a computer lab or in the regular classroom.
Review full-length reports. It’s a good idea to take students on tours through several reports like the ones they will be writing. Put these pages on transparencies so that you can show students the typical problems—but without sacrificing a forest to produce the hardcopy handouts.

Do the projects as classroom activities. In the following pages there are two projects in which students review a document, write a summary-review report, revise the document, or some combination. If you believe that your students are at the maximum of their workload already, keep these projects in the classroom or in the lab.
Technical-Writing Lab: Reviewing & Revising

In this lab, you’ll get some practice reviewing and revising portions of technical documents. All of the links in the following are available at:

www.io.com/~hcexres/power_tools/review_revise/

Chapter 18 — Reading Quiz

Before this lab, make sure you’ve read Chapter 18 and made a score on the reading quiz for this chapter as required by your instructor. This reading quiz is available at the following web address and can be e-mailed directly to your instructor:

www.io.com/~hcexres/power_tools/review_revise

Lab 1 — First-Pass Reviewing

In the first-pass review, you look for global problems involving things like audience, purpose, content, organization, transitions, and document-specific requirements. Take a look at the documents available the following web address, determine the first-pass problems, describe them in a memo or e-mail to your instructor, and (if required by your instructor) attach a revision. If you write a memo, put your name, First-Pass Review, and the date on this document.

www.io.com/~hcexres/power_tools/review_revise/first_pass.html

Lab 2 — Second-Pass Reviewing & Revising

In the second-pass review, you look for problems involving design and format, such as headings, lists, notices, tables, illustrations, and highlighting. Take a look at the documents available the following web address, determine the second-pass problems, describe them in a memo or e-mail to your instructor, and (if required by your instructor) attach a revision. If you write a memo, put your name, Second-Pass Review, and the date on this document.

www.io.com/~hcexres/power_tools/review_revise/second_pass.html

Lab 3 — Third-Pass Reviewing & Revising

In the third-pass review, you look for problems involving things like grammar, usage, punctuation, and spelling. You also look for sentence-style problems and technical (or mechanical) style problems. Take a look at the documents available the following web address, determine the third-pass problems, describe them in a memo or e-mail to your instructor, and (if required by your instructor) attach a revision. If you write a memo, put your name, Third-Pass Review, and the date on this document.

www.io.com/~hcexres/power_tools/review_revise/third_pass.html
Project 1 — Document Review

Using the strategy presented in Chapter 18 and the review-summary report shown in Chapter 22, review one of the documents available at the following web address:

www.io.com/~hcexres/power_tools/review_revise/review_projects.html

Use the “top–down” approach presented in Chapter 18. Start with the big issues such as audience, purpose, and content and work “downward” through the progressively less global and less critical ones until you get to issues such as typos and grammar. Evaluate the document in terms of its:

• success in communicating with its specific audience and in achieving its specific purpose.
• content—whether vital content is missing, whether there is unnecessary content, and whether the content is at the right level of detail for the audience.
• organization and transitions—see www.io.com/~hcexres/power_tools/organization.html and www.io.com/~hcexres/power_tools/transitions.html
• document type—does it contain all the required components? For example, if it’s a formal technical report, does it contain all the front and back matter elements specified by Chapter 15?
• use of page-design elements such as headings, lists, notices, and highlighting.
• use of visuals such as tables, charts, graphs, illustrations, and other types of figures.
• clarity of sentence style—look for the sentence-style problems presented at www.io.com/~hcexres/power_tools/sentence_style.html
• technical or “mechanical” style, such as abbreviations, acronyms, symbols, numbers, and hyphenation.
• grammar, usage, and punctuation.

When you have completed your review of the document, write a summary report similar to the excerpt of one shown in Chapter 22:

• Use a memo format.
• Use headings to block off each of the areas of your review comments.
• Provide examples as necessary.
• Recommend changes rather than merely pointing out problems.
• Find something good to say about the document—and exercise your tactfulness in telling the writer about the problems.
Project 2 — Document Review & Revision

Using the strategy presented in Chapter 18, revise one of the documents available at the following web address:

www.io.com/~hcexres/power_tools/review_revise/review_projects.html

Use the “top–down” approach presented in Chapter 18. Start with the big issues such as audience, purpose, and content and work “downward” through the progressively less global and less critical ones until you get to issues such as typos and grammar. Look for problems in the document in terms of its:

- success in communicating with its specific audience and in achieving its specific purpose.
- content—whether vital content is missing, whether there is unnecessary content, and whether the content is at the right level of detail for the audience.
- organization and transitions—see www.io.com/~hcexres/power_tools/organization.html and www.io.com/~hcexres/power_tools/transitions.html
- document type—does it contain all the required components? For example, if it’s a formal technical report, does it contain all the front and back matter elements specified by Chapter 15?
- use of page-design elements such as headings, lists, notices, and highlighting.
- use of visuals such as tables, charts, graphs, illustrations, and other types of figures.
- clarity of sentence style—look for the sentence-style problems presented at www.io.com/~hcexres/power_tools/sentence_style.html
- technical or “mechanical” style, such as abbreviations, acronyms, symbols, numbers, and hyphenation.
- grammar, usage, and punctuation.

When you have completed your review of the document, revise it:

1. Go to the web address mentioned, copy the text of the document you plan to revise, and paste it into your preferred word-processing software.

2. Revise the document carefully in terms of the review you just performed.

3. On a cover page to this revised document, put your name, Document Revision, and the date, and print it out for your instructor.
Chapter 18 — Reading Quiz

Read Chapter 18 of Power Tools for Technical Communication and answer each of the following. (A multiple-choice version is available at the website for this book.)

1. Explain the essential differences between reviewing and revising.

2. Describe the first-pass review and explain why it should come first.

3. Describe the second-pass review and explain why it should come second.

4. Describe the third-pass review and explain why it should come last.

5. Explain what are readability statistics for documents and why you might want to check them for a rough draft.

6. Describe what you are looking for when you review the technical style of a rough draft.

7. Describe what you are looking for when you review for sentence problems in a rough draft.

8. Explain why Chapter 18 recommends reviewing for grammar, punctuation, and spelling errors only at the end of the reviewing process.

9. Explain which parts of the rough draft of 20-page report you would review for transitions.

10. Explain why Chapter 18 recommends reviewing a rough draft in three “passes.”
Chapter 19 — Audience & Task Analysis

This chapter in *PowerTools* introduces students to the most fundamental of all technical-communication skills—audience and task analysis. So why is it buried so deep in the book? After all, most technical communication textbooks present the chapter as one of the very first, emphasizing its importance.

The problem is that an audience-analysis unit by itself without an immediate communication project too easily becomes an empty intellectual exercise for students. If they spend two, three, or four weeks wading through units on the meaning of technical communication, audience, technical writing style, ethics, internationalism, few will remember to apply audience-analysis and -adaptation strategies to their first writing project.

Often, it’s more effective to couple the audience part of Chapter 19 with the first writing project that students do. Later, couple the task-analysis part with the instructions project.

Teaching Ideas

Here are some suggestions for things to do in class to get students used to thinking about audiences and tasks and analyzing them carefully:

*Give the chapter reading quiz.* Have students read the chapter and take the reading quiz—either in class or in the lab. Discussing the answers is a good way to get students thinking about the concepts and strategies in this chapter.

*Use the labs.* The labs for this chapter involve defining audience characteristics, inventing realistic audiences, planning for audiences, and identifying tasks for equipment or procedures. You can do these labs either in a computer lab or in the regular classroom.
**Technical-Writing Lab: Audience & Task Analysis**

In this lab, you’ll get some practice analyzing and describing audiences, planning writing projects according to audience characteristics, and doing task analyses. All of the links in the following are available at:

www.io.com/~hcexres/power_tools/audience_task/

**Chapter 19— Reading Quiz**

Before this lab, make sure you’ve read Chapter 19 and made a score on the reading quiz for this chapter as required by your instructor. This reading quiz is available at the following web address and can be e-mailed directly to your instructor:

www.io.com/~hcexres/power_tools/audience_task/audtask_quiz.html

**Lab 1 — Defining Audience Needs and Interests**

Take a look at the following pairs of technical topics and audiences. Select three, and make a list of each audience’s likely interests and needs in relation to the topic:

<table>
<thead>
<tr>
<th>Topic</th>
<th>Audience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child abuse</td>
<td>New caseworkers</td>
</tr>
<tr>
<td>Child abuse</td>
<td>New caseworkers</td>
</tr>
<tr>
<td>Internet privacy issues</td>
<td>New Internet user</td>
</tr>
<tr>
<td>Internet privacy issues</td>
<td>E-commerce website developer</td>
</tr>
<tr>
<td>Bioengineering</td>
<td>Student considering a career</td>
</tr>
<tr>
<td>Bioengineering</td>
<td>Elected official such as a legislator</td>
</tr>
<tr>
<td>Lyme disease</td>
<td>Camping enthusiast</td>
</tr>
<tr>
<td>Lyme disease</td>
<td>Family practice physician</td>
</tr>
<tr>
<td>Wildlife rehabilitation</td>
<td>Veterinarian</td>
</tr>
<tr>
<td>Wildlife rehabilitation</td>
<td>Elected official such as a legislator</td>
</tr>
<tr>
<td>Food-borne pathogens</td>
<td>City health inspector</td>
</tr>
<tr>
<td>Food-borne pathogens</td>
<td>Restaurant worker</td>
</tr>
</tbody>
</table>
Lab 2 — Inventing Audiences

When you take a technical-writing course, you may lack real-world situations in which you can practice technical-writing skills. Instead, you may have to invent realistic situations and audiences. Consider the following technical-document projects, or topics, and invent audiences for them. Make sure your audiences are realistic and have a very definite need for the technical information:

- Food-borne diseases
- Biodiversity
- Pesticides
- Acoustics
- Math anxiety
- Artificial intelligence
- Accident prevention
- Big Bang Theory
- Human Genome Project
- Computer viruses
- Video game violence
- Fire ants

Lab 3 — Selecting Content according to Audiences

Choose one of the pair of technical topics and audiences in the following, and think of a writing project for it. Then, for the writing project, make a list of topics, concepts, and terminology you would include and those you would leave out.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Audience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child abuse</td>
<td>New caseworkers</td>
</tr>
<tr>
<td>Internet privacy issues</td>
<td>New Internet user</td>
</tr>
<tr>
<td>Internet privacy issues</td>
<td>E-commerce website developer</td>
</tr>
<tr>
<td>Bioengineering</td>
<td>Student considering a career</td>
</tr>
<tr>
<td>Bioengineering</td>
<td>Elected official such as a legislator</td>
</tr>
<tr>
<td>Lyme disease</td>
<td>Camping enthusiast</td>
</tr>
<tr>
<td>Lyme disease</td>
<td>Family practice physician</td>
</tr>
<tr>
<td>Wildlife rehabilitation</td>
<td>Veterinarian</td>
</tr>
<tr>
<td>Food-borne pathogens</td>
<td>Restaurant worker</td>
</tr>
</tbody>
</table>
Lab 4 — Defining Audience Characteristics

Study the excerpts at the following web address, and describe the audiences for which they are most appropriate:

www.io.com/~hcexres/power_tools/audience/define_chars.html

Lab 5 — Defining Audience Needs

Study the excerpts at at the following web address and define the information you would need to understand each one:

www.io.com/~hcexres/power_tools/audience/define_needs.html

Lab 6 — Planning for Audiences

Study the project descriptions at the following web address, and make notes on the why the audience needs the project, how they will use it, and how the project must be adapted for their background and knowledge:

www.io.com/~hcexres/power_tools/audience/plan_audience.html

Lab 7 — Defining Tasks

For instructions projects, it’s critical to identify the tasks that the audience needs help with. Read the following instruction projects, and list the tasks you would need to explain for each:

<table>
<thead>
<tr>
<th>Writing Project</th>
<th>Audience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ordinary home owners without chemistry background</td>
<td>Guide for above-ground pool maintenance</td>
</tr>
<tr>
<td>Cable modems: installation and use</td>
<td>Purchasers for home installation and use</td>
</tr>
<tr>
<td>Report on super-string theory</td>
<td>High school physics instructors</td>
</tr>
</tbody>
</table>
Project 1 — Audience Analysis

Using the discussion and examples in Chapter 19, write an audience description for a technical report, a magazine or journal article, or a chapter of a book. Here are the essential requirements:

- Choose a technical report, an article from a magazine or journal, or a chapter of a book that has technical content. The intended audience can be anyone from the nonspecialist to the expert. (Avoid advertising information.)
- Determine the level of knowledge that this example expects of its readers: what studies should they have done; what concepts and terminology must they know?
- Determine the level of experience that this example expects of its readers: what procedures or techniques should readers know; what training should they have had?
- Determine the needs of the audience: why are they reading the information and what do they expect from it?
- Determine the uses the audience will make of the information.
- Determine the level of technical detail that should be used in the information.
- Determine the outcomes that the writer expects from the information: what does the writer expect readers to do, think, or know as a result?
- Consider what unnecessary information that the writer should take care to exclude.
- Consider the writing style: given the audience, topic, and purpose of the information, what tone or personality should it have?
- Include an evaluation of the information: how well does the writer manage to satisfy the readers’ needs?
- Write an audience description, similar the ones in Chapter 19, containing as many relevant details based on the above questions as you can think of.
- Attach the document to your audience description, or provide the web address (URL) so that your instructor can review it.
Project 2 — Audience Translation

Find a technical report, a magazine or journal article or a chapter of a book that is written at a relatively high technical level but that you understand. “Translate” it: that is, rewrite all of it—or some part of it—so that nonspecialists (such as your instructor) can understand it. Here are the essential requirements:

• Find a technical report, a magazine or journal article or a chapter of a book that is written at a relatively high technical level but that you understand.
• *Translate* this information—some portion of it—so that nonspecialists can understand it.
• Define all potentially *unfamiliar terms*. In each instance, decide whether you want readers to learn the term or whether they needn’t be distracted with the term.
• Provide *examples* and *analogies* if they will help readers understand the concepts better.
• Carefully guide readers through any *important processes* that are mentioned in the document.
• Explain the *topic’s importance*; provide readers with some *motivation* as to why they should be interested in this document.
• Emphasize *transitions*; guide readers through your translation emphasizing how the pieces of information relate to each other.
• Attach an *audience description* for the original document.
• Include a copy of the *original document* (or its web address) to your translation.
Project 3 — Task Analysis

Using the discussion and examples in Chapter 19, do a task analysis on one of the procedures or equipment listed below (or one of your own). Here are the essential requirements:

- Pick one of the following 
  tasks or equipment (or one of your own) for a task analysis:

  \[
  \begin{array}{ll}
  \text{Tasks} & \text{Equipment} \\
  \text{Making bread} & \text{Food processor} \\
  \text{Registering for college courses} & \text{Hand-held food mixer} \\
  \text{Mowing a lawn} & \text{Lawn mower} \\
  \text{Planting a garden} & \text{FAX machine} \\
  \text{Composting} & \text{Paper shredder} \\
  \text{Washing clothes} & \text{Digital thermometer} \\
  \text{Accessing the Internet} & \text{Swiss army knife} \\
  \text{Finding a job} & \text{Simple electronic game}
  \end{array}
  \]

- Decide on the scope of this procedure (basic, advanced, special subset).
- Decide on the audience of this procedure (this set of tasks); define this audience’s knowledge, skills, background, needs, goals.
- Make a list of the tasks you’d need to cover in this procedure.
- Make a separate list of the tasks you would not cover in this procedure with notes on your reasons why.
- Write a task analysis, similar the one in Chapter 19, but also containing a brief description of the scope of the procedure and the audience of the procedure.
Chapter 19 — Reading Quiz

Read Chapter 19 of *Power Tools for Technical Communication*, and answer each of the following. (A multiple-choice version is available at the website for this book.)

1. Explain whether most readers of technical information have strong technical backgrounds and why.

2. In the traditional approach to audiences, one category reads technical information to make business or governmental decisions but may not have much actual technical knowledge about the topic. Explain which audience that is.

3. Also in the traditional approach to audiences, another category reads technical information to build, operate, or repair equipment. Explain which audience that is.

4. The traditional classification of audience uses *two* bases of classification. Explain what those are.

5. Describe the technique recommended by Chapter 19 for the process of writing for an audience.

6. Describe what is wrong with the older metaphors for the process of writing for an audience.

7. Define what Chapter 19 means by *tasks*, and provide some examples.

8. Explain how task analysis can be used in noninstructional writing projects.

9. Discuss at what point in a writing project you should analyze your audience and why.

10. Explain why audience is often the most important factor in the success or failure of a technical document.
Chapter 20. Finding Information

This chapter in *Power Tools* provides students with strategies for finding information in libraries, on the Internet, and in other resources.

Here are some goals students should strive for in this chapter:

- Know how to plan an information-search strategy.
- Understand the different types of information available from different types of resources (such as books, reports, magazine articles).
- Know how to find and use descriptors (keywords) in an information search.
- Use strategies for finding books, articles, reports, and reference works.
- Know what a periodical index is and how to use it.
- Know what a guide site is and how it can be useful in an information search.
- Use strategies for evaluating sources found in an information search.

Teaching Ideas

Here are some ideas for classroom activities to get your students introduced to searching for information:

*Give the chapter reading quiz.* Have students read the chapter and take the reading quiz—either in class or in the lab. Discussing the answers is a good way to get students thinking about the concepts and strategies in this chapter.

*Use the labs.* The labs for this chapter involve searching the web for various types of information and evaluating that information.

*Information search walk-through.* A useful thing to do with students is to rehearse the steps in searching for information. The steps that most students ignore are those at the beginning: planning the overall strategy. Come to class with several projects requiring different types of information. Discuss which of the different types of resources are likely to have the best information for each project. Brainstorm on descriptors and keywords. Discuss how bibliographies and footnotes are useful strategies for finding additional resources. End by discussing strategies for evaluating and selecting information sources.

*Projects.* Shown in the following pages, the annotated-bibliography project is a good one to merge with the formal, researched report project. You can make it a formal assignment (like the proposal) that students turn in leading up to the formal report itself.
Technical-Writing Lab — Finding Information

In this lab, you’ll get some practice finding information in libraries, on the Internet, and in other resources as well as evaluating the information that you find. All of the links in the following are available at:

www.io.com/~hcexres/power_tools/info_search/

Note: Do Labs 1 through 7 in sequence. Take notes during each of these labs, and as specified by your instructor, write a summary of your findings after the last one.

Chapter 20 — Reading Quiz

Before this lab, make sure you’ve read Chapter 20 and made a score on the reading quiz for this chapter as required by your instructor. This reading quiz is available at the following web address and can be e-mailed directly to your instructor:

www.io.com/~hcexres/power_tools/info_search/infosearch_quiz.html

Lab 1 — Use an Online Library

In this exercise, you find an online library and explore its resources:

1. Using the strategies in Chapter 20, find an online library—that is, a library offering its catalog, search tools, and other resources online.

2. Experiment with finding information items by author, by title, by subject, and by information type (book, encyclopedia, etc.)

3. Try to find online indexes for newspapers, magazines, and journals. If online periodical indexes are available, find out if you need special permission to access them.

4. Check to see if the online library has any full-text resources online: for example, dictionaries, encyclopedias, or journals. Find out if you need special permission to access them.

5. Take notes on the online library you’ve found, including its web address (URL) and the resources it provides.

Lab 2 — Find an Online Guide Site

In this exercise, you find “guide site” that provides a collection of resources related to a specific field:

1. Using the strategies in Chapter 20, find at least one online guide site related to your topic or to your field or major.

2. Search the guide site for special libraries and for book listings.
3. Search the guide site for index resources for field-specific newspapers, magazines, and journals.


5. Search the guide site for professional organizations and associations related to your topic or to your field or major.

6. Search the guide site for online resources related to your topic or to your field or major such as mailing lists, usenet resources, and specialized web sites.

7. Takes notes on the guide site you’ve found, including its web address (URL) and the resources it provides.

Lab 3 — Find Books Online

In this exercise, you find books using online search tools:

1. Use the online library you found in a preceding lab to search for books related to your topic or to your field or major.

2. Use the guide site you found in a preceding lab to search for books related to your topic or to your field or major.

3. Try finding books in one of the online bookstores such as amazon.com.

4. Check the bibliographies of any of the other information sources you’ve found for books related to your topic or to your field or major.

5. Takes notes on the books you’ve found, including their web addresses (URLs) where you found them.

Lab 4 — Find Articles Online

In this exercise, you find newspaper, magazine, and journal articles as well as articles from online radio and television resources using online search tools:

1. Use any of the resources you’ve learned about to find periodical indexes. (Guide sites may be a good starting point.)

2. Use the periodical indexes you find to search for articles related to your topic or to your field or major.

3. Look for indexes for newspapers—indexes either for individual newspapers or collections of newspapers.

4. Look for articles in online versions of radio and television resources.

5. Takes notes on the articles you’ve found, the indexes you found them in, and their web addresses (URLs).
Lab 5 — Find Reference Materials Online

In this exercise, you find reference materials—encyclopedias, dictionaries, handbooks, atlases, and other potentially useful reference works:

1. Use any of the resources you’ve learned about to find reference works. (Guide sites may be a good starting point.)
2. Find specific articles, entries, or chapters in the reference works related to your topic or to your field or major.
3. Takes notes on the articles you’ve found, the reference works you found them in, and their web addresses (URLs).

Lab 6 — Find Government Documents Online

In this exercise, you find government documents:

1. Use the strategies discussed in Chapter 20 to find government documents.
2. Takes notes on the documents you’ve found, the indexing source you found them in, and their web addresses (URLs).

Lab 7 — Evaluate Information Sources

In this exercise, you evaluate the information sources you’ve found:

1. Use the strategies discussed in Chapter 20 to evaluate how reliable, current, and complete are the information sources you’ve found.
2. Takes notes on your level of confidence for each information source.
**Project 1 — Annotated Bibliography**

In this project, you find information sources for your formal researched report project (or for a topic as specified by your instructor). For each potentially useful resource you find, you write a sentence or two describing it. Here are requirements for this project:

- Find a technical topic on which you could write a report. Narrow that topic for a specific audience, purpose, and situation. If it helps, create a rough outline. Here are some resources that may help:
  
  www.io.com/~hcexres/power_tools/topics.html  
  Chapter 19, “Audience and Task Analysis”  
  www.io.com/~hcexres/power_tools/narrowing.html  
  www.io.com/~hcexres/power_tools/outlining.html

- Find information resources in each of the following categories: books, magazine and journal articles, newspapers, technical reports, government documents, mailing lists (listserv), guide sites, and reference works (such as dictionaries, encyclopedias, handbooks, atlases).

- For each resource, copy whichever of the following are relevant: the author name, full title, publisher name, city of publication date, edition number, periodical name, pages, volume or issue number, web address (URL), date accessed, library call numbers.

- For resources like encyclopedias, provide details on specific articles.

- For each resource, write one or two sentences describing the resource and explaining how it might be useful in your project.

- Make a list of the descriptors and keywords you used. Also, provide information on the periodical indexes you used.

- Use the strategies for evaluating and selecting information resources discussed in Chapter 20. For example, throw out older books if newer ones have been published that have the same level of coverage and reliability.

- Write a brief explanation of which categories of information resources proved to be the most useful. Also comment on information you did not find.

- Briefly describe the topic, audience, purpose, and situation of your report project. Include an outline if required by your instructor.

- Format this annotated bibliography as a memorandum. Use headings for the different sections.
Chapter 20 — Reading Quiz

Read Chapter 20 of *Power Tools for Technical Communication*, and answer each of the following. (A multiple-choice version is available at the website for this book.)

1. Explain what a *Boolean search* is and why it is useful.

2. Explain why it is important to first develop an *overall information-search strategy* before you look for books, articles, reports, and other specific materials.

3. Describe what you might find at a *guide site* on the Internet and why such a website would be useful in an information search.

4. Explain why it is important to carefully *evaluate* information resources you find on the Internet.

5. Describe the typical *periodical index* and explain what it helps you find.

6. Explain what *government documents* are and why you should check them in an information search for a technical report.

7. Regardless of the resources you search, you use certain kinds of words to find books, articles, and reports. State the two names used in Chapter 20 for those words, and provide several examples.

8. Explain why you should *not* limit your information search to the Internet.

9. Explain how a reference work like *Thomas Register of American Manufacturers* can help in an information search.

10. Describe some nonprint, nonlibrary information sources that might be useful in an information search for a technical report.
Chapter 21. Citing Sources of Borrowed Information

This chapter in Power Tools presents the concept of intellectual property, shows how documentation of borrowed information fits that concept, and then provides instructions and examples for the most widely used documentation styles: IEEE, CBE, MLA, and APA.

Here are some goals that students should strive for in this chapter:

- Be able to explain the concept of intellectual property.
- Be able to explain the connection between intellectual property and documentation of borrowed information.
- Define plagiarism and compare it with copyright violation.
- Explain why documenting sources of borrowed information is not only a safe thing to do but also a mark of professionalism and expertise.
- Be able to construct information-sources lists in one or more of the documentation styles shown in Chapter 21.
- Be able to construct textual citations in one or more of the documentation styles shown in Chapter 21.

Teaching Ideas

Here are some ideas for classroom activities to get your students introduced to documenting the sources of information they borrow:

Give the chapter reading quiz. Have students read the chapter and take the reading quiz—either in class or in the lab. Discussing the answers is a good way to get students thinking about the concepts and strategies in this chapter.

Use the labs. The labs for this chapter have students construct an information-sources list using one of the documentation styles shown in Chapter 21 and then use that list to create textual citations for several pages of a report.
Technical-Writing Lab — Documenting Information

In this lab, you’ll get some practice creating information-sources lists and textual citations, using one or more the common documentation styles. All of the links in the following are available at:

www.io.com/~hcexres/power_tools/documentation/

Chapter 21 — Reading Quiz

Before this lab, make sure you’ve read Chapter 21 and made a score on the reading quiz for this chapter as required by your instructor. This reading quiz is available at the following web address and can be e-mailed directly to your instructor:

www.io.com/~hcexres/power_tools/documentation/documentation_quiz.html

Lab 1 — Catch the Plagiarist!

In this exercise, you study report excerpts and the sources used to write those excerpts to see whether the authors have plagiarized. Go to the following web address, and follow the instructions there for determining which excerpts have been plagiarized:

www.io.com/~hcexres/power_tools/documentation/plagiarism.html

Lab 2 — Create an Information-Sources List

In this exercise, you choose one of the documentation styles presented in Chapter 21 and create an information-sources list (also called References, Works Cited, Bibliography) according to that style. Go to the following web address, and follow the instructions there:

www.io.com/~hcexres/power_tools/documentation/sources_list.html

Lab 3 — Add Textual Citations

In this exercise, you use the information-sources list you created in the preceding lab to create textual citations according to that same style. Go to the following web address, and follow the instructions there:

www.io.com/~hcexres/power_tools/documentation/sources_list.html

*Textual citations* are the indicators in the body of a document that show which specific source the information at that point in the document came from.

Lab 4 — Link the Citations

In this exercise, you create hypertext links from textual citations in the body of a report to the full bibliographic information for those sources in the information-sources list. Go to the following web address, and follow the instructions there:

www.io.com/~hcexres/power_tools/documentation/link_citations.html

You need to have studied Chapter 17 to do this lab.
Chapter 21 — Reading Quiz

Read Chapter 21 of *Power Tools for Technical Communication*, and answer each of the following. (A multiple-choice version is available at the website for this book.)

1. Explain the concept of *intellectual property*.

2. Describe four different ways you can borrow information (different types of information) and be guilty of plagiarism if you do not indicate the sources of that information.

3. Explain how you are protecting intellectual property when you cite the sources of information that you borrow to write a document.

4. Describe how the number system works to indicate sources of borrowed information.

5. Name two examples of the number system used by professional organizations.

6. Some documentation styles require that you *not* use quotation marks, italics, or bold on the names of books and periodicals. However, for the documentation styles that do, which do you use?

7. Similarly, some documentation styles require that you *not* use quotation marks, italics, or bold on the names of journal or magazine articles. However, for the documentation styles that do, which do you use?

8. If you are writing an article for a professional journal in your field, which of the three documentation styles presented in Chapter 21 should you use?

9. While citing the sources of information you borrow can be tedious, there are some good reasons to do so other than merely avoiding plagiarism. What are some of those reasons?

10. Explain what *documentation* means in Chapter 21 of *Power Tools*. 
Chapter 22. Managing Team Projects

This chapter in *PowerTools* introduces students to the importance of team work in the workplace, the essential roles played in industry-based writing teams, and then provides some strategies for developing and working as a team in a technical writing course.

Here are some goals students should strive for in this chapter:

- Be able to explain why team skills are important to the modern workplace.
- Know the structure of a workplace writing team and the roles commonly played in those teams.
- Be familiar with some of the common problems experienced by teams—and writing teams in particular—and be able to anticipate ways of resolving them.
- Understand the role of the style guide in a team-writing project and know how to develop one.
- Understand the role of the prototype in a team-writing project and know how to develop one.
- Know how to review a writing-team member’s draft and write a review-summary memo.

If you are keen on building team work into your technical writing course, there are two general ways to do that:

- *Approach your course as one integrated team project.* At the beginning of the semester, divide students into teams of four or five (balancing good and weak writers, the motivated and the unmotivated, the technically strong and the technically terrified). Have them write application letters and resumes to get on their teams, proposals to do projects, specifications to describe their product designs, progress reports on the status of their projects, user guides for the users of their products, and so on.

- *Schedule a team-project unit.* If making an entire semester team based seems to limit the range and amount of writing that individual students do, schedule a single three- to four-week unit in which your students team-write a document. This is the approach that is sketched in Project 1 in the following pages.
Teaching Ideas

Here are some suggestions for things to do in class to introduce students to team-writing skills:

*Give the chapter reading quiz.* Have students read the chapter and take the reading quiz—either in class or in the lab. Discussing the answers is a good way to get students thinking about the concepts and strategies in this chapter.

*Seat-of-pants teamwork.* Have your students find some nonwriting project requiring multiple individuals, such as putting up a tent or cooking a spaghetti dinner. Without any planning whatsoever, have students just dive in and try to get the job done. When the smoke has cleared, get them to step back and reflect on who did what and why. Recall what problems occurred, such as tasks getting done out of order, tasks being duplicated, or people stepping on each other's toes (or turf). Have students list the roles that were assumed by team members and the steps in the process. Ask them to devise a plan for doing the same project that would make it efficient and effective next time.

*Obsessive-planning teamwork.* Ask students to try planning everything up-front. Decide who will do what and when, whether there should be an overall boss, how to resolve problems, and so on. Get everything in writing. When they've planned it to death, have them do the project. When they've finished the project, ask them to step back and have a "post-mortem" to identify what worked and what didn't. Ask them to write a revised version of their team plan.

*Use the labs.* The labs for this chapter involve writing team rules, creating prototypes and style guides, and reviewing team-member drafts. These labs focus on key phases of the team-writing process. These can be done either in a computer lab or in the regular classroom.

*Assign a project.* This chapter offers just one project: a single writing-team project in which three or four students plan and develop a technical document. However, you can use the labs in the following pages as projects.
Technical-Writing Lab: Writing Teams

In this lab, you’ll get some practice writing team rules, creating prototypes and style
guides, and reviewing team-member drafts. All of the links in the following are available
at:

www.io.com/~hcexres/power_tools/teams/

Chapter 22 — Reading Quiz

Before this lab, make sure you’ve read Chapter 22 and made a score on the reading quiz
for this chapter as required by your instructor. This reading quiz is available at the
following web address and can be e-mailed directly to your instructor:

www.io.com/~hcexres/power_tools/teams/teams_quiz.html

Lab 1 — Establish Team Rules

As discussed in Chapter 22, plenty of things can go wrong in team projects. Go to the
following web address, read the narrative of the team project from hell, and then follow
the instructions there for writing a set of team rules that might have alleviated the
problems:

www.io.com/~hcexres/power_tools/teams/team_story.html

Lab 2 — Create the Document Prototype and Style Guide

Prototypes and style guides are useful tools to enable a writing team to produce drafts that
are relatively consistent with each other. Go to the following web address, and follow the
instructions there for creating these two important tools for writing teams:

www.io.com/~hcexres/power_tools/teams/team_tools.html

Lab 3 — Review a Team Member’s Rough Draft

In the modern workplace, reviewing skills are critical to enable teams produce all sorts of
work products, including documentation and reports. Go to the following web address,
and follow the instructions there for reviewing a rough-draft chapter of a report and for
writing a review-summary memo containing your observations and recommendations:

www.io.com/~hcexres/power_tools/teams/draft_review.html
**Project 1 — Team-Writing Project**

In this project, you write a technical document as a team (three to five individuals). You go through all the steps of planning, writing, and revising that document *as a team*. Each of the phases described below requests that one or more team members write something—usually a memo—which they distribute to the rest of the team (one copy to the instructor).

**Build your team.** Either your instructor will choose team members, or you can put together your own team, from your class. Try to get a good mix of people with a variety of skills—technical, writing, graphics, and so on. Have one team member write a memo describing each team member, and distribute that memo to the rest of the team.

**Create a project schedule.** At some point, not necessarily just after you assemble your team, develop a schedule for your project with due dates for the major milestones. Have a team member put this schedule in a memo and distribute it to the rest of the team.

**Develop a project idea.** Get your team together to decide on a writing project, audience, purpose, type of document, and so on. Just about any of the projects in Part 1 of *Power Tools* will work. Get a team member to take notes on your team decisions and distribute them in the form of a memo to the rest of the team. (Ask for the project requirements from your instructor.)

**Agree on team rules.** Meet with your team to develop team rules that will help resolve conflicts that may come up during your work. Get a team member to write these rules as a memo to distribute to the rest of the team.

**Gather information for the project.** Plan how the team is going to find and share information resources for the project. Have one team member create and maintain an information-sources list for the project. Use your regular team meetings to keep each other from trying to find information someone has already found.

**Develop an outline.** At some point in the project, get team members together to create the outline of the document. Have one team member maintain the outline and distribute it (as well as updates) to the rest of the team.

**Create a document prototype.** At some point in the project, get team members together to develop the document prototype, which can include software templates and styles. Have one team member maintain these items and distribute a printout of the prototype (as well as updates) to the rest of the team.

**Create a style guide.** At some point in the project, get team members together to decide on style and format for the document. Appoint one team member to take notes, create a style guide, and distribute it (as well as updates) to the rest of the team.

**Hold regular meetings during the research and rough-draft phase.** Appoint a team member to take notes on discussion and decisions in each of these meetings and to distribute these meeting notes in the form of memos.

**Review team members’ rough drafts.** When team members complete the rough drafts of their assigned sections, exchange drafts, review those drafts, and write review-summary memos. Distribute each of those memos to every other member of the team.

**Revise and produce the final copy.** Get your team together to agree on revisions, and have your regular-meeting note taker summarize the agreements in a memo that gets distributed to the rest of the team.
Chapter 22 — Reading Quiz

Read Chapter 22 of *Power Tools for Technical Writers*, and answer each of the following. (A multiple-choice version is available at the website for this book.)

1. Explain why teams are emphasized in college courses—in particular, in technical writing courses.

2. Explain the role played by *style guides* in writing projects done by teams.

3. Describe the *prototype* as it is used by writing teams, and explain how it is used.

4. In team-based technical writing projects, how are the documents’ technical accuracy and completeness ensured.

5. Explain a good way to resolve a situation in which one team member simply does not do her or his agreed-upon share of the work.

6. Describe the methods that Chapter 22 suggests for avoiding problems in which certain team members end up doing too much or too little work.

7. Describe what Chapter 22 recommends to ensure that team members’ initial drafts use similar wording, capitalization, punctuation, highlighting, abbreviations, acronyms, spelling, and other such mechanics.

8. Describe the method that Chapter 22 recommends for ensuring that the overall format of team members’ initial drafts is as similar as possible—for example, page size, margins, tables, bulleted and numbered lists, and so on.

9. Explain the most important reason for getting the team together after the project is over.

10. Discuss why is teamwork necessary in the modern workplace.
Appendix A. Abbreviations, Symbols, Numbers

This appendix in *Power Tools* introduces students to guidelines for determining how to use abbreviations, acronyms, symbols, or numbers in their technical writing. Of course, it cannot begin to cover all the variations that occur across technical disciplines and professions, but it does give students a start. They should understand that they must refer to the style guides and reference tools that are standard in their particular fields.

Here are some goals students should strive for in this appendix:

- Understand how technical text differs from regular text (meant for mainstream readers) and how guidelines such as those in this appendix also differ.
- Know standard guidelines for using abbreviations and acronyms in technical text.
- Know standard guidelines for using symbols in technical text.
- Know standard guidelines for using numbers (digits for numbers or words for numbers) in technical text.
- Understand that most professions, disciplines, industries, and organizations have their own guidelines for abbreviations, acronyms, symbols, or numbers.

Consider using this appendix during one of your writing projects. Although just about any writing project will do, description is a good complement because of how much description and its applications rely on abbreviations, acronyms, symbols, and numbers. Appendix A also works well during those weeks when students are otherwise hard at work on the final report. Go over the guidelines and use the exercises in class—no outside reading or homework required.
Teaching Ideas

Here are some suggestions for things to do in class to introduce students to the common guidelines for abbreviations, acronyms, symbols, and numbers:

_Give the chapter reading quiz._ Have students read the chapter and take the reading quiz—either in class or in the lab. Discussing the answers is a good way to get students thinking about the concepts and strategies in this chapter.

_Use the exercises._ You can use the exercises at the end of Appendix A either in a computer lab or in the regular classroom. These same exercises as well as additional ones are available at:

www.io.com/~hcexres/power_tools/mechanics

_Find field-specific reference books._ Appendix A mentions that individual fields have their own reference books that contain specific guidelines for things like abbreviations, acronyms, symbols, and numbers. Have your students find such a reference book in their fields, and look up a few guidelines. For more structured activities, see Project 1 and 2 in the following pages.
Project 1 — Field-Specific References

As you know, most fields have their own specific guidelines for things like abbreviations, acronyms, symbols, and numbers. In this project, you find a reference work related to your field and look up a few guidelines in it:

1. Find a reference work closely associated with your field, profession, discipline, or occupation. It should contain specific guidelines concerning things like terminology, punctuation, abbreviations, acronyms, symbols, and numbers.

2. In this reference work, find at least one guideline for as many of the following as you can:
   a. when to use a digit for a number or a word for a number in ordinary text.
   b. how abbreviations should be punctuated.
   c. whether certain abbreviations should be upper- or lowercase.
   d. when a symbol as opposed to the word for the symbol should be used in regular text.
   e. when and how written-out versions of abbreviation, acronyms, or symbols should be included.
   f. what certain specialized abbreviations in this field mean and how they are capitalized and punctuated.
   g. how notices (cautions, dangers, warnings) should be formatted.

3. In a memo to your instructor, provide the full bibliographic citation for this reference work and summarize your findings.
Project 2 — Field-Specific Guidelines

As you know, most fields have their own specific guidelines for things like abbreviations, acronyms, symbols, and numbers. But sometimes there is no readily available reference book that states those guidelines. In this project, you find a document related to your field and study it to determine guidelines:

1. Find a document closely associated with your field, profession, discipline, or occupation. It can be a report, an article, a textbook, or user guide. It should contain obviously specialized usage concerning things like terminology, punctuation, abbreviations, acronyms, symbols, and numbers.

2. Study this document to determine guidelines for as many of the following as you can:
   a. when to use a digit for a number or a word for a number in ordinary text.
   b. when abbreviations should be punctuated.
   c. whether certain abbreviations should be upper- or lowercase.
   d. when a symbol as opposed to the word for the symbol should be used in regular text.
   e. when and how written-out versions of abbreviation, acronyms, or symbols should be included.
   f. what certain specialized abbreviations in this field mean and how they are capitalized and punctuated.
   g. how notices (cautions, dangers, warnings) should be formatted.

3. In a memo to your instructor, provide the full bibliographic citation for this document and then state the guidelines that you’ve determined. (You can use the excerpt from a style guide in Chapter 22 as a model.)
Appendix A — Reading Quiz

Read this section of *Power Tools for Technical Communication*, and answer each of the following. (A multiple-choice version is available at the website for this book.)

1. NASA has just doubled its asteroid search budget to <three million/3 million/3,000,000> <dollars/$>.

2. To build the purple martin bird house, you’ll need to get <four/4> <foot>/' by <eight/8> <foot>/' by one-quarter inch sheet of plywood and a <four/4> <inch>/" by <four/4> <inch>/" by <fourteen/14> <foot>/' cedar post, among other things.

3. The SportsTech BikeLite is a battery-powered light source that uses <light-emitting diodes/LEDs> to provide its light.

4. The bike light is about <seven/7> centimeters by <five/5> <centimeters/cm> by <four/4> <centimeters/cm> and it weighs approximately <sixty/60> <grams/g> (including the battery).

5. For example, NIST-7, a <cesium/Cs> clock at the <National Institute of Standards and Technology/NIST>, is accurate to <five/5> parts in $10^{15}$ (meaning it will lose about <one/1> second in <six million/6 million/6,000,000> years).

6. In March <nineteen-ninety-eight/1998>, astronomers warned that an asteroid could come within <thirty thousand>30,000 kilometers of Earth or even strike Earth in <2028/two-thousand-twenty-eight>.

7. It’s rare that asteroids are more than <one/1> <kilometer/km> across.

8. According to Donald Yeomans, head of the near-Earth objects program office at the <Jet Propulsion Laboratory/JPL>, there are no known near-Earth objects that will threaten Earth in the next century.

9. For example, gold fish enjoy water temperatures of <sixty-nine/69> <degrees/°F> or less.

10. On a diamond’s surface, the distance between adjacent <hydrogens/Hs> is about <two-and-a-half/2.5> <Angstroms/Å>.

11. A <micron/μm> is <one millionth/1 millionth/.000001> of a <meter/m>.

12. Currently <ninety-five/95> <percent/%> of all energy produced in the world is made by one or another method of burning <carbon dioxide/CO$_2$> in the atmosphere.

13. In the United States today there are an estimated <fifteen/15> <million/000,000> people who have been diagnosed with Diabetes Mellitus.

14. Diabetes is known as the <seventh/7th> leading cause of death in the United States.

15. Microsoft’s popular software programs Word and Excel include within their hidden software code a <thirty-two/32>-digit number, called a Globally Unique Identifier,
which is transmitted to Microsoft whenever a customer registers a copy of Windows 98 using its automated Registration Wizard.

16. At <six/6> o’clock the <five/5> men made their way to <four-hundred-thirty-five/435> <Second/2nd> Street where they began remodeling the small house.

17. Not until the <nineteen-hundred-ninety-nine/1999> bonfire tragedy that killed <twelve/12> students did the university seriously question whether the tradition should continue.

18. The Challenger Deep is lowest point on earth, about 10,924 <m/meters> below sea level.

19. Some parts of the Pacific Ocean floor are spreading more than <a dozen/12> <centimeters/cm> a year.

20. Scientists have developed numerous <General Circulation Models (GCM)/CGM (General Circulation Models)>, which involve computer simulations of the interactions among land, air water, ice, and sunlight, to predict future climate patterns.
Appendix B. Punctuation

This appendix in *Power Tools* provides a review of some of the most important comma rules as well as standard rules for colons, semicolons, dashes, hyphens, apostrophes, and quotations.

Keep in mind that Appendix B covers only the most common rules for these marks of punctuation. You can point students to a wealth online materials for punctuation at this web address:

www.io.com/~hcexres/power_tools/punctuation

Here are some goals students should strive for in this appendix:

- Apply the standard rules for commas, using the grammatical structure of the sentence as a guide.
- Apply the standard rules for semicolons.
- Apply the standard rules for colons.
- Apply the standard rules for hyphens—in particular, those for compound modifiers.
- Apply the standard rules for dashes.
- Apply the standard rules for apostrophes.
- Apply the standard rules for quotation marks and avoid the misuse of quotation marks common in technical text.

Consider using this appendix during one of your writing projects. Just about any writing project will do. Appendix B also works well during those weeks when students are otherwise hard at work on the final report. Go over the guidelines and use the exercises in class: no outside reading or homework required.
Teaching Ideas

Here are some suggestions for things to do in class to give students a review of commas, semicolons, colons, apostrophes, dashes, hyphens, and quotation marks:

*Give the chapter reading quiz.* Have students read the chapter and take the reading quiz—either in class or in the lab. Discussing the answers is a good way to get students thinking about the marks of punctuation covered in this chapter.

*Use the exercises.* You can use the exercises at the end of Appendix B either in a computer lab or in the regular classroom. These same exercises as well as additional ones are available at:

www.io.com/~hcexres/power_tools/punctuation

*Take the online sentence diagnostic.* Available at the preceding web address is a sentence diagnostic that covers grammar, usage, punctuation, and sentence-style problems. It includes 50 items and can take up to an hour and a half. At the end, students can send their results to themselves and to their instructor.
Appendix B — Reading Quiz

Read this section of *Power Tools for Technical Communication*, and correct each of the following for comma, semicolon, colon, dash, hyphen, and apostrophe problems. (A multiple-choice version is available at the website for this book.)

1. Seven astronauts were killed when the space shuttle they were piloting the *Challenger* exploded early in the flight.
2. Donated by the non-profit Vietnam Veterans Memorial Fund the new computer lab at a university in Hanoi will help economically disadvantaged Vietnam gain access to the World Wide Web.
3. With an increasing number of technology-related jobs in the new economy experts fear girls who lack computing skills might be left behind.
4. Luddites a group of workingmen who rioted and destroyed new technology that they felt threatened jobs and wages named themselves after a mythical King Lud.
5. Outbreaks of Luddism which occurred mostly in Lancashire, Cheshire, and Yorkshire, England were harshly suppressed by the British government.
6. Enemies of the Luddites claimed that the men were irrational that they had an unfounded fear of science and technology.
7. However, their supporters had another viewpoint the men were defending their jobs and lifestyles from technology which would displace them.
8. Many travelers take advantage of duty free shops overseas, where they can buy products without paying taxes on them.
10. Generation Xers are considered cynical and negative the digital generation is expected to be worldly and optimistic.
11. This digital generation is the biggest ever they outnumber even the Baby Boomers.
12. The 1950s have been called the “Golden Age of Science Fiction” and for the most part Hollywood’s view of technology and technological process was positive and optimistic.
13. Sometimes science fiction inspires science fact and a case in point involves a Texas Instruments engineer who came up with an idea for a new use of technology after watching an episode of *Deep Space Nine*.
14. Many people still believe that women are not interested in technology but women like Ada Byron Lovelace and Rear Admiral Grace Hopper are testaments to the technological abilities of women.
15. Admiral Hopper possessed a variety of talents: in addition to her outstanding technical skills, she was a whiz at marketing repeatedly demonstrated her business and political insight and persevered despite obstacles.

16. When you're holding an online conversation whether it's an e-mail exchange or a response to a discussion group posting don't forget that the other person has feelings that might be hurt by a rude or thoughtless post.

17. In order to protect the air Congress enacted the Clean Air Act of 1970 and amended it in 1977.

18. The “digital divide” defined as the gap between people who can afford to gain access to information technology and those who cannot has the potential to further isolate uneducated and poorer people from the prosperity of the “information age.”

19. Novelists in the 1920s and 1930s predicted much of our technology and its impact on our world and anticipated advancements such as miniaturization.

20. Cookies are small pieces of information that a Web site can store in your browser the Web site can then recognize you when you return.

21. Web site developers like cookies they can be useful in marketing online ordering and remembering passwords.

22. Other people worry that cookies might help a Web site invade a user's privacy in a variety of ways by keeping a record of where the user goes by stealing personal information or maintaining a list of purchases.

23. Many Internet users have heard of “cookies” they just don't have a firm idea of what this term means.

24. Many countries already have privacy related regulations others will be considering whether such regulations are necessary.

25. Employees for the start up company were hand picked by the CEO.

26. Because the data carrying capacity of telephone lines known as bandwidth is low receiving electronic data can take a long time.

27. While computers are now the primary means of accessing the Internet we’re already seeing other Internet enabled devices such as pagers and cell phones which can send and receive e-mail and access the Web.

28. It's a popular myth that viruses can invade your computer when you open a piece of e-mail.

29. In fact the viruses deadly effects happen only if you open a file that comes attached the e-mail. Even very good virus protection programs can't protect computers from every new virus.

30. Therefore it is a user's responsibility to be vigilant. A virus can do its dirty work only if computers owners let down their guards.
Appendix C. Grammar Favorites

This appendix in Power Tools reviews some of the most common grammar–usage problems occurring in technical-writing courses: specifically, fragments, comma splices, pronoun-reference problems, and parallelism. No doubt we could have added subject-verb agreement, modifier problems, and other such familiar creatures; but these were my “favorites.”

You can point students to a wealth online materials for grammar and usage at this web address:

www.io.com/~hcexres/power_tools/grammar

Here are some goals students should strive for in this appendix:

- Recognize and know some strategies for correcting fragments.
- Recognize and know some strategies for correcting comma splices.
- Recognize and know some strategies for correcting pronoun-reference problems.
- Recognize and know some strategies for correcting parallelism problems.
- Know how to find information on other grammar–usage problems.

Consider using this appendix during one of your writing projects. Although just about any writing project will do, instructions are particularly well complemented with this focus on grammar. Appendix C also works well during those weeks when students are otherwise hard at work on the final report. Go over the guidelines and use the exercises in class: no outside reading or homework required.
Here are some suggestions for things to do in class to give students a review of fragments, comma splices, pronoun-reference problems, and parallelism:

**Give the chapter reading quiz.** Have students read the chapter and take the reading quiz—either in class or in the lab. Discussing the answers is a good way to get students thinking about the concepts and strategies in this chapter.

**Use the exercises.** You can use the exercises at the end of Appendix C either in a computer lab or in the regular classroom. These same exercises as well as additional ones are available at:

www.io.com/~hcexres/power_tools/grammar

**Find information on other grammar problems.** Appendix C reviews only fragments, comma splices, pronoun-reference problems, and parallelism. Have your students use the preceding web address to find online resources for subject-verb agreement, problem modifiers, adjective–adverb problems, and so on.

**Use the additional exercises.** At the preceding address are links to explanations and exercises for just about every grammar, usage, punctuation, and style problem known to humankind. You can have your students do these readings and exercises in an Internet-connected computer lab.

**Take the online sentence diagnostic.** Also available at the preceding web address is a sentence diagnostic that covers grammar, usage, punctuation, and sentence-style problems. It includes 50 items and can take up to an hour and a half. At the end, students can send their results to themselves and to their instructor.
Appendix C — Reading Quiz

Read this section of *Power Tools for Technical Communication*, and correct each of the following for problems involving fragments, comma splices, parallelism, and pronouns. (A multiple-choice version is available at the website for this book.)

1. Despite opponents’ claims that Internet privacy legislation would hinder the ability of corporations to satisfy the customers’ demands. Large numbers of corporations are still collecting information and tracking Internet users without the customers’ consent or knowledge. Even though these corporations claim to regulate themselves.

2. To solve the communication problem, the managers agreed to relay information about personnel changes, updates for major projects, and to make announcements aimed at the entire company through weekly meetings.

3. The World Wide Web has given the ordinary person access to information they never had before.

4. Privacy guidelines have been very successful in Europe, it seems logical for the United States to adopt similar guidelines for Internet

5. The tutorials for Microsoft Excel tables show to the user where they are to click or type.

6. Some financial magazines have warned readers about brokers who advise them to move money into variable annuities from 401(k)s, retirement plans that are tax deferred, or IRAs.

7. At the meeting, the speaker explained how to maintain the environment within an aquarium. What types of pumps and plants are best, and how to introduce new fish to the new aquarium.

8. The judges evaluated the Web sites based on content, style, how interactive it was, and the quality of the graphics.

9. Student Bonfire workers are trained in the proper use of axes, machetes, and chain saws, however there are still may risks involved in preparing the logs.

10. In a Japanese garden, designers use many techniques to ensure that the garden is attractive, as well as in harmony with its surroundings and does not sacrifice the sense of privacy.