# 15
# Designing Pages and Documents

**P***age design*, the layout of words and graphics, determines the look of a document. Well-designed pages invite users in, guide them through the material, and help them understand and remember it.

In this electronic age the term “page” takes on broad meanings: On the computer screen, a page can scroll on endlessly. Also, *page* might mean a page of a report, but it can also mean one panel of a brochure or part of a reference card for installing printer software. The following discussion focuses mainly on traditional paper (printed) pages. See Designing On-Screen Documents later in this chapter for a discussion of pages in electronic documents.

## PAGE DESIGN IN WORKPLACE DOCUMENTS

People read work-related documents only because they have to. If they have easier ways of getting the information, people will use them. In fact, busy users often only skim a document, or they refer to certain sections during a meeting or presentation. Amid frequent distractions, users want to be able to leave the document and then return and locate what they need easily

**NOTE** *The so-called “paperless office” is largely a myth. In fact, information technology produces more paper than ever. Also, as computers generate more and more written messages, both electronic and hard copy, any document competes for audience attention. Overwhelmed by information overload, people resist any document that looks hard to get through.*

Before actually reading the document, people usually scan it first, to get a sense of what it’s about and how it’s organized. An audience’s first impression tends to involve a purely visual, esthetic judgment: “Does this look like something I want to read, or like too much work?” Instead of an unbroken sequence of paragraphs, users look for charts, diagrams, lists, various type sizes and fonts, different levels of headings, and other aids to navigation. Having decided at a glance whether your document is visually appealing, logically organized, and easy to navigate, users will draw conclusions about the value of your information, the quality of your work, and your overall credibility.

## HOW PAGE DESIGN TRANSFORMS A DOCUMENT

To appreciate the impact of page design, consider Figures 15.1 and 15.2: Notice how the information in Figure 15.1 resists interpretation. Without design cues, we have no way of chunking this information into organized units of meaning. Figure 15.2 shows the same information after a design overhaul.

## DESIGN SKILLS NEEDED IN TODAY'S WORKPLACE

As more and more software is developed to help people with page layout and document design, you very well may be responsible for preparing actual publications as part of your job—often without the help of clerical staff, print shops, and graphic artists. In such cases, you will need to master a variety of technologies and to observe specific guidelines.

### Desktop Publishing

Desktop publishing (DTP) systems such as *PageMaker*, *Adobe Framemaker*, or *Quark* combine word processing, typesetting, and graphics. Using this software along with optical scanners, and laser printers, one person, or a group working collaboratively, controls the entire production cycle: designing, illustrating, laying out, and printing the final document (Cotton 36–47):

- Text can be typed or scanned into the program and then edited, checked for spelling and grammar, displayed in columns or other spatial arrangements, set in a variety of sizes and fonts—or sent electronically.
- Page highlights and orienting devices can be added: headings, ruled boxes, vertical or horizontal rules, colored background screens, marginal sidebars or labels, page locator tabs, shadowing, shading, and so on.
- Images can be drawn directly or imported into the program via scanners; charts, graphs, and diagrams can be drawn with graphics programs. These visuals then can be enlarged, reduced, cropped, and pasted electronically on the text pages.
- All work at all stages can be stored electronically for later use, adaptation, or updating. Documents or parts of documents used repeatedly (*boilerplate*) can be retrieved when needed, or modified or inserted in some other document.

Many of these DTP features are now contained in today's sophisticated word-processing programs. And with the enhancement of *groupware* (group authoring systems), writers from different locations can produce and distribute drafts online, incorporate reviewers' comments into their drafts, and publish documents collaboratively.

### Electronic Publishing

Your work may involve electronic publishing (epublishing), in which you use programs such as *RoboHelp, Rainmaker,* or *Dreamweaver* to create documents in digital format for the Web, the company intranet, or as online help screens. You also might produce Portable Document Files, PDF versions of a document, using software such as ***Build****fire.*

For projects that will be shared across different types of computer platforms, you might use markup languages. These languages use marks, or "tags," to indicate where the text should be bold, indented, italicized, and so on. Word-processing or page layout files from different programs or platforms are not always compatible, but with markup languages, once the tags are inserted, documents can be shared across many platforms.

Two examples of markup languages are standardized general markup language (SGML) and hypertext markup language (HTML). The first, SGML, is used for printed documents. The second, HTML, is used for hypertext pages—electronic documents such as online help screens or Web pages. For more on markup languages, see pages 462–63.

### Using Style Sheets and Company Style Guides

Style sheets are helpful guides that ensure consistency across a single document or a set of documents. If you are working as part of a team, each writer needs to be using the same typefaces, fonts, headings, and other elements in identical fashion.

- The first time you use or define a specialized term, highlight it with italics or **boldface.**
- In headings, capitalize prepositions of five or more letters ("Between," "Versus").

The more complex the document, the more specific the style sheet should be. All writers and editors should have a copy. Consider keeping the style sheet on a Web page for easy access and efficient updating.

In addition to style sheets for specific documents, some organizations produce style guides containing rules for proper use of trade names,

appropriate punctuation, preferred fonts and typefaces, and so on. Style guides help ensure a consistent look across a company's various documents and publications. See Figure 15.3 for a sample style-guide page.

## CREATING A USABLE DESIGN

Approach your design decisions from the top down. First, consider the overall look of your pages; next, the shape of each paragraph; and finally, the size and style of individual words and letters (Kirsh 112). Figure 15.4 depicts how design considerations move from large matters to small.

**NOTE** *All design considerations are influenced by the budget for a publication. For instance, adding a single color, say, to major heads, can double the printing cost.*

If your organization prescribes no specific guidelines, the following design principles should serve in most situations.

### Shaping the Page

In shaping a page, consider its look, feel, and overall layout. The following suggestions will help you shape appealing and usable pages.

**USE THE RIGHT PAPER AND INK.** For routine documents (memos, letters, in-house reports) print in black ink, on 8½-by-11-inch low-gloss, white paper. Use rag-bond paper (20 pound or heavier) with a high fiber content (25 percent minimum). Shiny paper produces glare that tires the eyes. Flimsy or waxy paper feels inferior.

For documents that will be published (manuals, marketing literature), consider the paper's grade and quality. Paper varies in weight, grain, and finish—from low-cost newsprint, with noticeable wood fiber, to wood-free, specially coated paper with custom finishes. Choice of paper depends on the artwork to be included, the type of printing, and the intended esthetic effect: For example, you might choose specially coated, heavyweight, glossy paper for an elegant effect in an annual report (Cotton 73).

**USE HIGH-QUALITY TYPE OR PRINT.** Print hard copy on an inkjet or laser printer. If your inkjet's output is blurry, consider purchasing special inkjet paper.

**USE CONSISTENT PAGE NUMBERS, HEADERS, AND FOOTERS.** For a long document, count your title page as page i, without numbering it, and number all front matter pages, including the table of contents and abstract, with lowercase roman numerals (ii, iii, iv). Number the first text page and subsequent pages with arabic numerals (1, 2, 3). Along with page numbers, *headers* or *footers* appear in the top or bottom page margins, respectively. These provide chapter or article titles, authors' names, dates, or other publication information. (See, for example, the headers on the pages in this book and on page 345.)

**USE A GRID** Readers make sense of a page by looking for a predictable and consistent underlying structure, with the various elements located where they expect. By subdividing a page (or screen) into square and rectangular modules, a grid helps you organize your layout (Hilligoss 97).

With a view of a page's Big Picture, you can plan the size and placement of your visuals and calculate the number of lines available for written text. Most important, you can rearrange text and visuals repeatedly to achieve a balanced and consistent design (White, *Editing* 58). Here are just a few of the many possible grid patterns:

Some form of two-column grid is commonly used in manuals. See also the *Consider This* boxes and Checklists for Usability in this text. Brochures and newsletters typically use a two- or three-column grid. Web pages (see page 362) often use a combined vertical/horizontal grid. Figures 15.1 and 15.2 use a single-column grid, as do most memos, letters, and reports. (Grids are also used in storyboarding; see page 227.)

Figure 15.5 illustrates how a horizontal grid can transform the design of important medical information for consumers.

**NOTE** *While grid structures are especially useful in laying out newsletters and Web pages, they can be overly restrictive, allowing too much or too little space for the text that is intended. As a result, the text is forced to fit into the "mold"*

*imposed by the grid (White,* Editing *58). If this happens, be prepared to reconfigure your grid.*

**USE ADEQUATE WHITE SPACE.** White space is all the space not filled by text or images. White space divides printed areas into small, digestible chunks. For instance, it separates sections in a document, headings and visuals from text, paragraphs on a page.

Well-designed white space imparts a shape to the whole document, a shape that orients users and lends a distinctive visual form to the printed matter by:

1. keeping related elements together
2. isolating and emphasizing important elements
3. providing breathing room between blocks of information

Pages that look uncluttered, inviting, and easy to follow convey an immediate sense of user-friendliness.

**PROVIDE AMPLE AND APPROPRIATE MARGINS.** Small margins crowd the page and make the material look difficult. On your 8 1-2-by-11-inch page, leave margins of at least 1 or 1 1-2 inches. If the manuscript is to be bound in some kind of cover, widen the inside margin to two inches.

Headings, lines of text, or visuals that abut the right or left margin, without indentation, are designated as *flush right* or *flush left*.

Choose between *unjustified* text (uneven or "ragged" right margins) and *justified* text (even right margins). Each arrangement creates its own "feel."

> To make the right margin even in justified text, the spaces vary between words and letters on a line, sometimes creating channels or rivers of white space. The eyes are then forced to adjust continually to these space variations within a line or paragraph. Because each line ends at an identical vertical space, the eyes must work harder to differentiate one line from another (Felker 85). Moreover, to preserve the even margin, words at line's end are often hyphenated, and frequently hyphenated line endings can be distracting.

> Unjustified text, on the other hand, uses equal spacing between letters and words on a line, and an uneven right margin (as traditionally produced by a typewriter). For some readers, a ragged right margin makes reading easier. These differing

line lengths can prompt the eye to move from one line to another (Pinelli 77).
In contrast to justified text, an unjustified page looks less formal, less distant,
and less official.

Justified text seems preferable for books, annual reports, and other formal materials. Unjustified text seems preferable for more personal forms of communication such as letters, memos, and in-house reports.

**KEEP LINE LENGTH REASONABLE.** Long lines tire the eyes. The longer the line, the harder it is for the reader to return to the left margin and locate the beginning of the next line (White, *Visual Design* 25).

Notice how your eye labors to follow this apparently endless message that seems to stretch in lines that continue long after your eye was prepared to move down to the next line. After reading more than a few of these lines, you begin to feel tired and bored and annoyed, without hope of ever reaching the end.

Short lines force the eyes back and forth (Felker 79). "Too-short lines disrupt the normal horizontal rhythm of reading" (White, *Visual Design* 25).

Lines that are too
short cause your eye
to stumble from one
fragment to another
at a pace that too
soon becomes
annoying, if not

nauseating.

A reasonable line length is sixty to seventy characters (or nine to twelve words) per line for an 8½-by-11-inch single-column page. The number of characters will depend on print size. Longer lines call for larger type and wider spacing between lines (White, *Great Pages* 70).

Line length, of course, is affected by the number of columns (vertical blocks of print) on your page. Two-column pages often appear in newsletters and brochures, but research indicates that single-column pages work best for complex, specialized information (Hartley 148).

**KEEP LINE SPACING CONSISTENT.** For any document likely to be read completely (letters, memos, instructions), single-space within paragraphs and double-space between. Instead of indenting the first line of single-spaced paragraphs, separate them with one line of space. For longer documents likely to be read selectively (proposals, formal reports), increase line spacing within paragraphs by one-half space. Indent these paragraphs or separate them with one extra line of space.

**NOTE** *Although academic papers generally call for double spacing, most workplace documents do not.*

**TAILOR EACH PARAGRAPH TO ITS PURPOSE.** Users often skim a long document to find what they want. Most paragraphs, therefore, begin with a topic sentence forecasting the content.

Use a long paragraph (no more than fifteen lines) for clustering material that is closely related (such as history and background, or any body of information best understood in one block).

Use short paragraphs for making complex material more digestible, for giving step-by-step instructions, or for emphasizing vital information.

Instead of indenting a series of short paragraphs, separate them by inserting an extra line of space (as here).

Avoid "orphans," leaving a paragraph's opening line on the bottom of a page, or "widows," leaving a paragraph's closing line on the top of the page.

**MAKE LISTS FOR EASY READING.** Users often prefer lists rather than continuous prose paragraphs (Hartley 51). Types of items you might list: advice or examples, conclusion and recommendations, criteria for evaluation, errors to avoid, materials and equipment for a procedure, parts of a mechanism, or steps or events in a sequence. Notice how the preceding information becomes easier to grasp and remember when displayed in the list below.

Types of items you might list:

- advice or examples
- conclusions and recommendations
- criteria for evaluation
- errors to avoid
- materials and equipment for a procedure
- parts of a mechanism
- steps or events in a sequence

A list of brief items usually needs no punctuation at the end of each line. A list of full sentences or questions requires appropriate punctuation after each item.

Depending on the list's contents, set off each item with some kind of visual or verbal signal. If the items require a strict sequence or chronology (say, parts of a mechanism or a set of steps), use arabic numbers (1, 2, 3) or the words *First, Second, Third,* and so on. If the items require no strict sequence (as in the list above), use dashes, asterisks, or bullets. For a checklist, use open boxes.

Introduce your list with an explanation. Phrase all listed items in parallel grammatical form. If the items suggest no strict sequence, try to impose some logical ranking (most to least important, alphabetical, or some such). Set off the list with extra white space above and below.

**NOTE** *A document with too many lists appears busy, disconnected, and splintered (Felker 55). And long lists could be used by unethical writers to camouflage bad or embarrassing news (Williams 12).*

### Styling the Words and Letters

In styling words and letters, we consider typographic choices that will make the text easy to read.

**USE STANDARD TYPE SIZES.** To figure out the number of words that can fit on a page, designers traditionally measure the size of type and other page elements (such as visuals and line length) by *picas* and *points*. One pica equals roughly 1-—6 of an inch and one point equals 1-—12 of a pica (or 1-—72 of an inch).

The height of a typeface, the distance from the top of the *ascender* to the base of the *descender*, is measured in points. Word-processing programs offer various type sizes: Standard type sizes for manuscripts run from 10 to 12 point. Use larger or smaller sizes for headings, titles, captions (brief explanation of a visual), sidebars (marginal comments), or special emphasis. Use a consistent type size for similar

elements throughout the document. For overhead transparencies or computer projection in oral presentations, use 18- or 20-point type for body text and 20 or greater for headings.

**Select Appropriate Fonts.** A font, or typeface, is the style of individual letters and characters. Each font has its own *personality:* ''The typefaces you select for ... [heads], subheads, body copy, and captions affect the way readers experience your ideas'' (*Aldus Guide* 24).

Particular fonts can influence reading speed by as much as 30 percent (Chauncey 26).

Word-processing programs offer a variety of fonts like the examples below, listed by name.

For visual unity, use different sizes and versions (**bold,** *italic,* SMALL CAPS) of the same font throughout your document—except possibly for headings, captions, sidebars, or visuals. Try to use no more than two different typeface families throughout a document.

All fonts divide into two broad categories: *serif* and *sans serif.* Serifs are the fine lines that extend horizontally from the main strokes of a letter.

> Serif type makes printed body copy more readable because the horizontal lines "bind the individual letters" and thereby guide the reader's eyes from letter to letter—as in the type you are now reading (White, *Visual Design* 14).

> In contrast, sans serif type is purely vertical (like this). Clean looking and "businesslike," sans serif is considered ideal for technical material (numbers, equations, etc.), marginal comments, headings, examples, tables, and captions to pictures and visuals, and any other material set off from the body copy (White, *Visual Design* 16). Sans serif fonts are also more readable in *projected* environments such as overhead transparencies and slides.

European readers generally prefer sans serif fonts, and other cultures have their own preferences as well. Learn all you can about the design conventions of the culture you are addressing.

**NOTE** *Except for special emphasis, use conservative fonts; the more ornate ones are harder to read and inappropriate for most workplace documents.*

**AVOID SENTENCES IN FULL CAPS.** Sentences or long passages in full capitals (uppercase letters) are hard to read

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because uppercase letters lack ascenders
and descenders (page 352), and so all
words in uppercase have the same visual
outline (Felker 87). The longer the
passage, the harder readers work to grasp
your emphasis.
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**HARD** ACCORDING TO THE NATIONAL COUNCIL ON RADIATION PROTECTION, YOUR MAXIMUM ALLOWABLE DOSE OF LOW-LEVEL RADIATION IS 500 MILLIREMS PER YEAR.

**EASIER** According to the National Council on Radiation Protection, your MAXIMUM allowable dose of low-level radiation is 500 millirems per year.

Lowercase letters take up less space, and the distinctive shapes make each word easier to recognize and remember (Benson 37).

Use full caps as section headings (INTRODUCTION) or to highlight a word or phrase (WARNING: NEVER TEASE THE ALLIGATOR). As with other highlighting options discussed below, use full caps sparingly.

**Highlighting for Emphasis**

Effective highlighting helps users distinguish important from less important elements. Highlighting options include fonts, type sizes, white space, and other graphic devices that:

- emphasize key points
- make headings prominent
- separate sections of a long document
- set off examples, warnings, and notes

On a typewriter, you can highlight with underlining, FULL CAPS, dashes, parentheses, and asterisks.

You can indent to set off examples, explanations, or any material that should be distinguished from other elements in your document.

Using ruled (or typed) horizontal lines, you can separate sections in a long document:

Using ruled lines, broken lines, or ruled boxes, you can set off crucial information such as a warning or a caution:

*Caution:* A document with too many highlights can appear confusing, disorienting, and tasteless.

See pages 327–28 for more on background screens, ruled lines, and ruled boxes.

Word processors offer highlighting options that include **boldface,** *italics,* SMALL CAPS, varying type sizes and fonts, and color. For specific highlighted items, some options are better than others:

**Boldface works well for emphasizing a single sentence or brief statement, and is perceived by readers as being "authoritative"** (*Aldus Guide* 42).

*Italics suggest a more subtle or "refined" emphasis than boldface* (Aldus Guide *42*). *Italics can highlight words, phrases, book titles, or anything else you would have underlined on a typewriter. But multiple lines (like these) of italic type are hard to read.*

SMALL CAPS WORK FOR HEADINGS AND SHORT PHRASES, BUT ANY LONG STATEMENT ALL IN CAPS IS HARD TO READ.

Small type sizes (usually sans serif) work well for captions and credit lines and as labels for visuals or to set off other material from the body copy.

***Large type sizes and dramatic typefaces are both hard to miss and hard to digest. Be conservative—unless you really need to convey forcefulness.***

Color is appropriate only in some documents, and only when used sparingly. Pages 324–29 discuss how color can influence audience perception and interpretation of a message.

Whichever highlights you select, be consistent. Make sure that all headings at one level are highlighted identically, that all warnings and cautions are set off identically, and so on. And *never* combine too many highlights.

### Using Headings for Access and Orientation

Readers of a long document often look back or jump ahead to sections that interest them most. Headings announce how a document is organized, point readers to what they need, and divide the document into accessible blocks or "chunks." An informative heading can help a person decide whether a section is worth reading (Felker 17). Besides cutting down on reading and retrieval time, headings help readers remember information (Hartley 15).

**DECIDE HOW TO PHRASE YOUR HEADINGS.** Depending on your purpose, you can phrase your headings in three different ways: as a

topic phrase, a statement, or a question (*Writing User-Friendly Documents* 17):

| Heading Type | Example | When to Use |
|---|---|---|
| *Topic headings* use a word or short phrase. | **Usable Page Design** | When you have lots of headings and want to keep them short and sweet. Or to sound somewhat formal. Frequent drawback: too vague. |
| *Statement headings* use a sentence or explicit phrase. | **How to Create a Usable Page Design** | To assert something specific about the topic. Occasional drawback: wordy and cumbersome. |
| *Question headings* pose the questions in the same way readers are likely to ask them. | **How Do I Create a Usable Page Design?** | To invite readers in and to personalize the message, making people feel directly involved. Occasional drawbacks: too "chatty" for formal reports or proposals; overuse can be annoying. |

To avoid verbal clutter, brief topic headings can be useful in documents that have numerous subheads (as in a textbook or complex report)—as long as readers understand the context for each brief heading. Statement headings work well for explaining how something happens or operates (say, "How the Fulbright Scholarship Program Works"). Question headings are most useful for explaining how to do something because they address the actual questions users will have about a procedure (say, "How Do I Apply for a Fulbright Scholarship?").

Phrase your headings to summarize the content as concisely as possible (Horn 190). But keep in mind that a vague or overly general heading can be more misleading or confusing than no heading at all (Redish et al. 144). Compare, for example, a heading titled "Evaluation" versus "How the Fulbright Commission Evaluates a Scholarship Application"; the second version tells readers exactly what to expect.

**MAKE HEADINGS SPECIFIC AS WELL AS COMPREHENSIVE.** Focus the heading on a specific topic. Do not preface a discussion of the effects of acid rain on lake trout with a broad heading such as ''Acid Rain.'' Use instead ''The Effects of Acid Rain on Lake Trout.''

Also, provide enough headings to delineate each discussion section. If chemical, bacterial, and nuclear wastes are three *separate* discussion items, provide a heading for each. Do not simply lump them under the sweeping heading "Hazardous Wastes." If you have prepared an outline for your document, adapt major and minor headings from it.

**MAKE HEADINGS GRAMMATICALLY CONSISTENT.** All major topics or all minor topics in a document share equal rank; to emphasize this equality, express topics at the same level in identical-—or parallel-—grammatical form.

**NONPARALLEL HEADINGS**

How to Avoid Damaging Your Disks:

1. Clean Disk Drive Heads
2. Keep Disks Away from Magnets
3. Writing on Disk Labels with a Felt-Tip Pen
4. It is Crucial That Disks Be Kept Away from Heat
5. Disks Should Be Kept Out of Direct Sunlight
6. Keep Disks in Their Protective Jackets

In items 3, 4, and 5, the lack of verbs in the imperative mood obscures the relationship between individual steps. This next version emphasizes the equal rank of these items.

**PARALLEL HEADINGS**

3. Write on Disk Labels with a Felt-Tip Pen
4. Keep Disks Away from Heat
5. Keep Disks Out of Direct Sunlight

Parallelism helps make a document readable and accessible.

**MAKE HEADINGS VISUALLY CONSISTENT.** ''Wherever heads are of equal importance, they should be given similar visual expression, because the regularity itself becomes an understandable symbol'' (White, *Visual Design* 104). Use identical type size, typeface, and indentation for all headings at a given level.

**LAY OUT HEADINGS BY LEVEL.** Like a good road map, your headings should clearly announce the large and small segments in

your document. (Use the logical divisions from your outline as a model for heading layout.) Think of each heading at a particular level as an ''event in a sequence'' (White *Visual Design* 95).

Headings vary in positioning and highlighting, depending on their level (Figure 15.6). Follow these suggestions for using headlines effectively:

- *Ordinarily, use no more than four levels of heading (section, major topic, minor topic, subtopic).* Excessive heads and subheads make a document seem cluttered or fragmented.
- *To divide logically, be sure each higher-level heading yields at least two lower-level headings.*
- *Insert one additional line of space above each heading.* For double-spaced text, triple-space before the heading, and double-space after; for single-spaced text, double-space before the heading, and single-space after.
- *Never begin the sentence right after the heading with "this," "it," or some other pronoun referring to the heading.* Make the sentence's meaning independent of the heading.
- *Never leave a heading floating as the final line of a page.* Unless two lines of text can fit below the heading, carry it over to the top of the next page.
- *Use different type sizes to reflect levels of heads.* Readers often equate large type size with importance (White, *Visual Design* 95; Keyes 641). Set major heads in a larger type size.
- *Use running heads (headers) or feet (footers) in long documents.* To help users navigate a document with multiple sections or chapters, include a chapter or section heading across the top or bottom of each page.

When headings show the relationships among all the parts, readers can grasp at a glance how a document is organized.

## AUDIENCE CONSIDERATIONS IN PAGE DESIGN

In deciding on a format, work from a detailed audience and use profile (Wight 11). Know your audience and their intended use of your information. Create a design to meet particular needs and expectations:

- If people will use your document for reference only (as in a repair manual), use plenty of headings.
- If users will follow a sequence of steps, show that sequence in a numbered list.
- If users will need to evaluate something, provide a checklist of criteria (as in this book at the end of most chapters).
- If users need a warning, highlight the warning so that it cannot possibly be overlooked.
- If users have asked for a one-page report or résumé, save space by using the 10-point type size.
- If users will be facing complex information or difficult steps, widen the margins, increase all white space, and shorten the paragraphs.

Regardless of the audience, never make the document look "too intellectually intimidating" (White, *Visual Design* 4).

Consider also your audience's cultural expectations. For instance, Arabic and Persian text is written from right to left instead of left to right (Leki 149). In other cultures, readers move up and down the page, instead of across. A particular culture might be offended by certain icons or by a typeface that seems too plain or too fancy (Weymouth 144). Ignoring a culture's design conventions can be interpreted as disrespect.

**NOTE** *Even the most brilliant page design cannot redeem a document with worthless content, chaotic organization, or unreadable style. The value of any document ultimately depends on elements beneath the visual surface.*

## DESIGNING ON-SCREEN DOCUMENTS

Most of the techniques discussed so far in this chapter are appropriate for both paper and electronic documents. However, electronic documents (including Web pages, online help, and CD-ROMs) have certain special design requirements.

### Web Pages

Each "page" of a Web document typically stands alone as a discrete "module," or unit of meaning. Instead of a traditional introduction-body-conclusion sequence of pages, material is displayed in screen-sized chunks, each linked as hypertext. Links serve the purpose of headings. Each link takes users to a deeper level of information. Also, to be read on a computer screen, pages must accommodate small screen size, reduced

resolution, and reader resistance to scrolling—among other restrictions.

In designing Web pages, follow these general guidelines:

- *Provide margins so that your text won't drift (or run off) the edge of the user's screen.*
- *Display the main point close to the top of each page.*
- *Keep sentences and paragraphs shorter and more concise than for hard copy.*
- *Display links, navigation bars, hot buttons, and help options on each page.*
- *As with printed text headings, make your links consistent: Use the same typeface and font for the same level heading. (Always test your links to be sure they actually work.)*
- *Don't use underlines for emphasis because these might be confused with hyperlinks.*
- *Don't mix and match too many typefaces.*
- *Use sans serif type for body text.*
- *Don't use small type: anything under 12 point is hard to read.*

Figure 15.7 incorporates these elements. See Chapter 19 for more on designing Web pages and other electronic documents.

Special authoring software such as *Adobe FrameMaker* or *RoboHelp* automatically converts hard copy document format to various on-screen formats, chunked and linked for easy navigation. However, whenever possible, work with a professional Web designer to be sure your on-screen document looks and functions the way you want it to.

**NOTE** *To learn about Web page design in full, you will need to take classes or read books about this topic. Many organizations have employees with job titles such as Webmaster or Web Designer who are responsible for designing Web pages.*

### Online Help

Like Web page design, designing online help screens is a specialty. Many organizations, especially those that produce software, hire technical communicators who know how to produce online help screens. As with all page design, paper or electronic, producing online help screens requires consistency. For more on this topic see pages 460, 534.

## CD-ROMs

If you are designing information for a CD-ROM, the same concepts apply. Typefaces need to be clear and legible for the screen. Different fonts should be used consistently. Headings should also be consistent, and any links should be tested.

**EXERCISES**

1. Find an example of effective page design, in a textbook or elsewhere. Photocopy a selection (two or three pages), and attach a memo explaining to your instructor and classmates why this design is effective. Be specific in your evaluation. Now do the same for an example of bad page design, making specific suggestions for improvement. Bring your examples and explanations to class, and be prepared to discuss why you chose them.

   As an alternative assignment, imagine that you are a technical communication consultant, and address each memo to the manager of the respective organization that produced each document.
2. These are headings from a set of instructions for listening. Rewrite the headings to make them parallel.

   - You Must Focus on the Message
   - Paying Attention to Nonverbal Communication
   - Your Biases Should Be Suppressed
   - Listen Critically
   - Listen for Main Ideas
   - Distractions Should Be Avoided
   - Provide Verbal and Nonverbal Feedback
   - Making Use of Silent Periods
   - Are You Allowing the Speaker Time to Make His or Her Point?
   - Keeping an Open Mind Is Important

3. Using the usability checklist on page design above, redesign an earlier assignment or a document you've prepared on the job. Submit to your instructor the revision and the original, along with a memo explaining your improvements. Be prepared to discuss your format design in class.
4. Anywhere on campus or at work, locate a document with a design that needs revision. Candidates include career counseling handbooks, financial aid handbooks, student or faculty handbooks, software or computer manuals, medical information, newsletters, or registration procedures. Redesign the document or a two- to five-page selection from it. Submit to your instructor a copy of the original, along with a memo explaining your improvements. Be prepared to discuss your revision in class.

5. Figure 15.8 shows two different designs for the same message. Which version is most effective, and why? Prepare a list of the specific elements in the improved version, and be prepared to discuss your list in class.

**COLLABORATIVE PROJECT**

Working in small groups, redesign a document you select or your instructor provides. Prepare a detailed explanation of your group's revision. Appoint a group member to present your revision to the class, using an opaque or overhead projector, a large-screen monitor, or photocopies.

**15.1**
How does page
design affect
workplace dynamics? Find out more at
<www.ablongman.com/
lannonweb>

Technical documents rarely get undivided attention

Readers are attracted by documents that appear inviting and accessible

**FIGURE 15.1**
**Ineffective Page Design**
This design provides no "road map" to indicate how the document is organized or what main ideas it conveys.

*Source: U.S.
Department of
Energy*.

**FIGURE 15.2 Effective Page Design** Headings, spacing, color, italics, and listed items provide immediate clues as to how this document is organized, which ideas are most important, and how the ideas relate.

What DTP systems can do

Possible style-sheet entries

**FIGURE 15.3 A Sample**
**Page from a Publishing Company's Style Guide for Authors**

*Source:* Guide for Authors,
*published by
Addison Wesley Longman, Inc., 1998. Reprinted by permission
of Pearson
Education, Inc.*

**FIGURE 15.4**
**A Flowchart for Decisions in Page Design**
A top-down design strategy moves from large elements to small.

Grids provide a blueprint for page design

**15.2**
Find out how
white space
conveys attitude at
<www.ablongman.com/
lannonweb>

**FIGURE 15.5 Two Versions of a Consumer Label** Notice how the discrete horizontal modules in version B provide an underlying structure that is easy to navigate.

*Source: Nordenberg, Tamar.* "*New Drug Label Spells It Out Simply*." FDA Consumer *(Reprint) July 1999.*

Use white space to orient the readers

Justified lines are set flush left and right.

Unjustified lines are set flush left only.

Shape each paragraph

Use lists to help readers organize their understanding

Select the appropriate point size

Select a font for its personality

Decide between serif and sans serif type

Font preferences are culturally determined

FULL CAPS are good for emphasis but they make long passages hard to read.

Purposes of highlighting
Not all highlighting is equal
**15.3**
For more on visual “chunking” visit
<www.ablongman.com/
lannonweb>
How to provide effective headings
For two-sided pages (say, in a book), running heads or feet
on each left
page would align toward the page’s left side.
**FIGURE 15.6 Recommended Format for Word-Processed Headings** Be sure that all headings at a given level are phrased identically (as a topic phrase, a statement, or a question).
How users’ needs determine page design
**15.4**
For more on screen
versus paper
design visit
<www.ablongman.com/
lannonweb>
Elements of on-screen page design
How to design on-screen documents
**FIGURE 15.7 A User-Friendly Web Page** Immediately below the headline and the main site links, a prominent heading announces the page’s main topic. This is followed by a paragraph summarizing the safety and health problem and describing CDC’s mission. Main topic links appear in the left column, with links to key subtopics and resources in the right column. In the center column, special features are highlighted with graphics. Links at the bottom of the page connect to additional resources and provide contact information. Despite these various layers of information, the page is easy to navigate.
*Source: Workplace Safety and Health from Centers for Disease Control and Prevention, <www.cdc.gov>.*

### CHECKLIST for Usability of Page Design

*(Numbers in parentheses refer to the first page of discussion.)*

**Shape of the Page**

- Is the paper white, low-gloss, rag bond, with black ink? (344)
- Is all type or print neat and legible? (346)
- Are pages numbered consistently? (346)
- Is the grid structure effective? (347)
- Does the white space adequately orient the readers? (347)
- Are the margins ample? (349)
- Is line length reasonable? (349)
- Is the right margin unjustified? (349)
- Is line spacing appropriate and consistent? (350)
- Does each paragraph begin with a topic sentence? (350)
- Does the length of each paragraph suit its subject and purpose? (350)
- Are all paragraphs free of "orphan" lines or “widows”? (350)
- Do parallel items in strict sequence appear in a numbered list? (351)
- Do parallel items of any kind appear in a list whenever a list is appropriate? (351)

## Style of Words and Letters

- Is the body type size 10 to 12 points? (352)

- Are fonts used effectively and consistently? (353)
- Do full caps highlight only single words or short phrases? (354)

## Emphasis and Orientation

- Is the highlighting consistent, tasteful, and subdued? (354)
- Are all patterns distinct enough so that readers will find what they need? (355)
- Are there enough headings for readers to know where they are in the document? (356)
- Are headings informative, comprehensive, specific, parallel, and visually consistent? (357)
- Are headings clearly differentiated according to level? (357)

## Audience Considerations

- Does this design meet the audience's needs and expectations? (360)
- Does this design respect the cultural conventions of the audience? (360)

For more exercises, visit
<www.ablongman.com/lannon>

**FIGURE 15.8**
**Two Different Designs for the Same Message**

*Source:* Writing User-Friendly Documents.
*Washington DC: U.S. Bureau of Land Management, 2001. 41.*