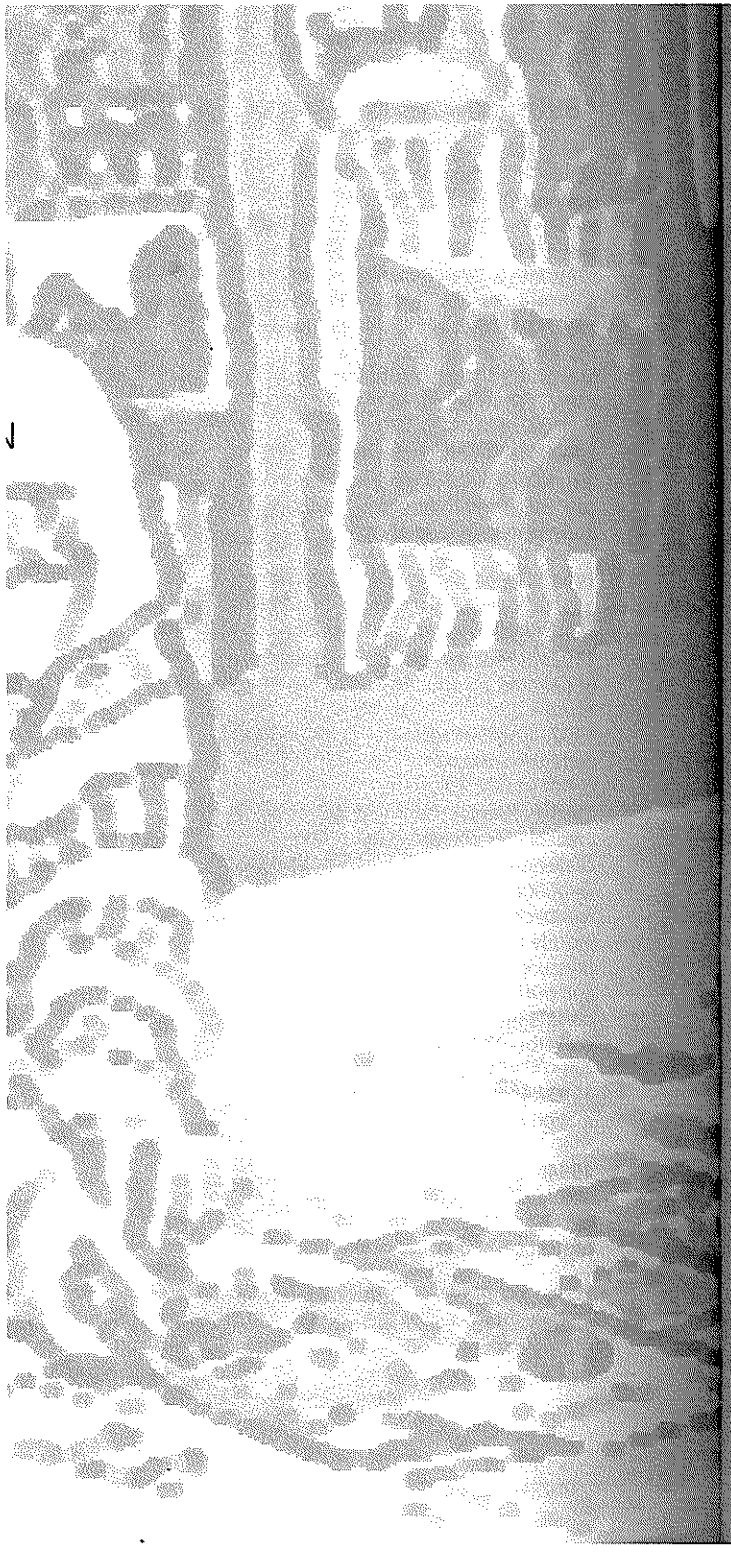

3

How Documents Engage Readers' Thinking and Feeling

This chapter characterizes the ways in which people's thinking and feeling may come into play as they interpret documents. ❧ The chapter begins by exploring what it means to analyze the audience and profiles three ways to consider the reader. ❧ Next it discusses how people's feelings may influence their decisions about when to read documents and when to ignore them. ❧ These ideas are illustrated through a study of teenagers interpreting brochures about the dangers of taking drugs. Their interpretations illustrate how readers may form impressions not only of the message but also of the messenger—portraying how thoughts and feelings interact as readers make sense of content and as they construct ideas about whom may be presenting the content (the persona, organizational voice, or corporate identity). These findings suggest that "catching the reader in the act" of interpretation can provide important clues about how readers think and feel. Most of all, this chapter provides a sense of the dynamic interplay between cognition and emotion during reading.

Left-hand page. *Samantha Krampf is an eighth-grade student at Carlynton Junior High School (Rosslyn Farms, PA) and a participant in a study described in this chapter. Samantha read and evaluated several brochures that were designed to encourage teenagers to "Just Say No to Drugs." Shown here is a still from a videotape as she chose a brochure to read.*

in junior high school, particularly in grades seven and eight, about the problems of global warming.

In carrying out this goal, what might the document design teams do in analyzing the needs of the audience? The following vignettes depict alternative paths the teams might take.

Document Design Team 1: The Classifiers

The first document design team approaches the problem by brainstorming characteristics of the audience. Their aim is to distinguish junior high school students from college-age students. They begin by classifying the features of the younger audience. The team spends considerable upfront time cataloging all the facts they can dig up that might be relevant to know about boys and girls in grades seven and eight: their age, attitudes about science (and whether these attitudes differ by gender), hobbies that might be science related, average vocabulary level, and their interest in the environment. Once the team gathers what they deem to be enough information concerning these issues, their audience analysis is complete. They next make an outline that incorporates the audience information. The outline helps them to keep the facts about the audience in mind as they draft the new version of the article. After their first draft is complete, they make sure the language isn't too hard by running the text through a style checker (it conducts a grammar analysis and computes values for several readability formulas, such as the Gunning-Fog Index and the Flesch test).[1] The style checker tells the team that the language is suitable for a ninth-grade audience. Since their revision is for seventh and eighth graders, they adjust the vocabulary "down" to make it simpler. Once their draft gets a score for a seventh-grade student, the team knows that they are done.

[1] For a discussion of these and other readability formulas, see Klare (1984).

Document Design Team 2: The Intuitors

The second document design team begins by reading the original article carefully and making notes about what might interest a junior high school student. Team members then share with each other their personal reflections about global warming and swap stories about the science classes they took in junior high. As they reminisce, they generate ideas for pictures for the article, exploring their intuitions about what would make the topic interesting to junior high school students. Next the team turns to drafting the new version, at which point document designers try to imagine how junior high school students might interpret their ideas. One document designer remembers how she responded to environmental topics at the

same age. Another recalls his younger cousin talking about a TV program on the greenhouse effect and tries to imagine what kind of graphics might engage his cousin. Once the first draft is ready, each team member critiques it individually by trying to put himself or herself in the shoes of a junior high school student. Their critiques lead the team to argue over their choices of examples and visuals, over what "rings true" to their image of the audience. Some members of the team feel the illustrations are too childish while others feel the examples require too much knowledge of science. Their disagreements stimulate a number of fresh ideas for creating their final draft.

Document Design Team 3: The Listeners

The third document design team begins by calling people who might know where to find a group of junior high school students who could critique the team's drafts. Members of the team want to know what seventh and eighth grade boys and girls understand about the science of global warming. They are concerned with creating visuals that will both help students to understand the science and motivate them to learn about the topic. Initially, the team collects a set of articles written for young people about topics such as photosynthesis and the effects of deforestation. Next they visit several junior high schools to elicit students' feedback about the language and pictures employed in these articles. They also talk with teachers about "what works" with science topics. The students and teachers give the team members many ideas they can use for generating a new version of the article. After discussing a number of alternatives, the team decides to organize the revision around a set of illustrations rather than around prose. Once they complete a draft, they again seek the feedback of the audience. This time they listen to students as they read their draft, paying attention to how students use the illustrations, work through the concepts, and map pictures to text. The team members pay attention to what students find interesting and to what confuses or bewilders them. Drawing on this moment-by-moment view of the real reader, the team creates their final draft.

DIFFERENT VISIONS, DIFFERENT MODELS OF THE AUDIENCE?

The actions of these three document design teams typify three distinct visions of how document designers may analyze their audiences. The first view focuses on classifying audiences by identifying their features. I will call this approach *classification-driven audience analysis*. The second view

emphasizes the powers of self-reflection and personal experience to imagine an audience. I will call this approach *intuition-driven audience analysis*. The third view focuses on gathering feedback from the real audience to find out how readers actually interact with the text. I will call this approach *feedback-driven audience analysis*.

In practice, document designers tend to internalize their views about how best to proceed in analyzing the audience. Rarely do they stop to choose one model or another. Rarely do they realize that what they do "naturally" is a choice among alternatives. Over time, these visions of the reader can become working mental models, providing document designers with cues about when to think about the reader and how. In the next section, I overview these three audience analysis models: (1) *classification-driven*, (2) *intuition-driven*, and (3) *feedback-driven*. Understanding them can help document designers make more perceptive choices about when to rely on one model or another.

Classification-driven Audience Analysis

Developed during the 1960s,[2] classification-driven audience analysis provides professional communicators with methods for creating profiles of their anticipated readership, often called the "target audience." Communicators begin their analysis by brainstorming about the audience and by cataloging audience demographics (e.g., age, sex, income, educational level) or psychographics (e.g., values, lifestyles, attitudes, personality traits, work habits). These audience profiles are then used to classify the audience into groups, for example, nontechnical or technical, general or specialized, novice or expert.

[2] Prominent educators in technical communication such as Kenneth Houp and Thomas E. Pearsall (1968, 1969) and J. C. Mathes and Dwight Stevenson (1976) pioneered innovative methods for classifying the audience.

Although these categories may suggest what sort of prose and graphics the audience might want, the leap between audience analysis and textual action is quite large. Authors of books about writing and design that present a version of the classification model tend to skirt the issue of how professionals actually put these analyses to use. Authors make it seem as though document designers move effortlessly from producing audience profiles to making audience-sensitive decisions during writing and design. Many books suggest that classifying the target audience can, for example, help communicators to select a proper tone, adjust their prose or graphics to the reading level of the audience, or provide the kind of information readers most need. But these books rarely give explicit advice about how this can be done.

A strength of classification-driven models is that they prompt communicators to think about the needs and expectations of different groups for

their documents. For example, classifying the audience may tell document designers that novice users of computers may need more detailed procedures while expert users may need only quick-reference information.

The weakness of classification-driven models is that they encourage a rather narrow and static view of readers. They tend to lead communicators to focus on the similarities within reader groups and to ignore their diversity. *A key feature of the classification-driven models is that they "fossilize the reader" as a static compilation of demographics and psychographics that document designers somehow "keep in mind" as they compose.* This tendency to stereotype the reader may lead the communicator to draw faulty inferences about the audience's needs. As Long (1990) points out,

> [T]he writer might decide that his or her audience consists primarily of white, middle class (whatever that may mean to the writer) Americans who live in the southwestern region of the United States. This may be true, but how can such information be applied other than by taking an unjustifiable inductive leap to conclusions about the tastes, political preferences, religious or moral inclinations, or general interests from this group? What could be legitimately concluded from such information? This audience tends to be politically conservative? It distrusts divorce as an easy solution to marital difficulties? It knows little about science? It is quite knowledgeable about the history of the southwestern states? Clearly none of these are certainly valid or viable conclusions. (pp. 74–75)

Despite its limitations, audience-classification models offer document designers "a method—composed of a series of questions about the reader's background, education, position ... to make their writing [and design] appropriate for the reader" (Allen, 1989, p. 53).

Intuition-driven Audience Analysis

Described by rhetoricians and writers of fiction since the 1950s,[3] the intuition-driven model of audience analysis is one in which communicators *imagine* the audience and draw on their internal representation of the audience as a guide to writing and design.[4] In using this model, document designers look inward to "visualize the audience" or to "listen to their inner voice" as they compose.[5] The image of the audience that emerges from this careful introspection can take various shapes: (1) a wholly fictitious reader with no correspondence to any real person, (2) a constructed reader, based at least in part on memories of real people, or (3) an imagined ideal reader, that is, the reader the document designer most wants to read his or her text. There are many terms that have been used to

[3] For example, see Booth (1961), Gibson (1950), and Ong (1975).

[4] The intuition-driven model appears to have links to Romantic notions of writing in which authors are guided by an evolving inner vision of the text. For example, in the nineteenth century, see Coleridge (1817); in the twentieth, see Elbow (1973, 1981). Both were discussed briefly in Chapter 2, the section "Three Traditions that Shaped Thinking and Beliefs about Writing and Graphic Design" (pp. 55–68).

[5] Interestingly, writers tend to talk about visualizing the reader while designers tend to talk about listening to their inner voice; compare, for example, Elbow (1981, p. 71) on writing and Rand (1993, p. 46) on design.

portray the reader that may be constructed—"implied reader," "invoked reader," "fictionalized reader," "created reader," "audience invoked," "imagined reader," or "ideal reader."[6] (In this chapter, I use "imagined reader.") Despite a lack of consistent terminology, the ideas about how the reader is created in the mind's eye are roughly the same. Communicators are said to first imagine their readers and then to use this representation dynamically as they write or design. That is, they move dialogically from text to thought, from reflecting on what they have written or visualized so far to projecting or role-playing the audience's possible reaction to those words or pictures, from thinking about their personal vision for the text to making textual decisions that take that interaction into account.

[6] For a discussion of implied and created readers, see Booth (1961), Ede and Lunsford (1984), Gibson (1950), Gragson and Selzer (1990), Iser (1978), McCormick (1994), and Tompkins (1980).

The intuition-driven model then operates by using *a mental construct of imagined readers* rather than of actual readers (even though the imagined readers could be based on memories of real people). In other words, when document designers imagine their readers, they may think not of actual people but of a composite of human characteristics (e.g., a reader who is curious, intelligent, technically minded, critical). Or they may think of people they have met before who could be like the intended audience (e.g., someone like my Aunt Sally who has never used a computer). Or they may use themselves as a model of the reader (e.g., I know nothing about investing in the stock market and here's the important thing I'd want to know). Document designers may even imagine an ideal reader they hope to interest in the text (e.g., as they might if they were generating an article to the op-ed section of the *New York Times,* a brochure about mutual funds, or a marketing piece about a new technical product). As we can see, the construct of the imagined reader that document designers may hold in consciousness is a complex set of "estimations, implied responses, and attitudes" (Park, 1982, p. 251).

With a representation of their imagined reader in mind, communicators choose words and graphics to invite the audience to engage with the text. They rely on the semantic and syntactic resources of language to provide cues for the reader—cues that not only encourage the audience to read, but also help to define the role that communicators wish the audience to adopt in responding to the text (Ede & Lunsford, 1984). Theorists call this rhetorical move "invoking" a reader through textual choice (thus, some describe the imagined audience as "invoked readers" or as the "audience invoked"[7]). The idea is that through the careful orchestration of textual or graphic cues (e.g., tone, typeface, illustrations, examples) and textual conventions (e.g., choosing the most appropriate genre and medium), document designers can suggest to readers a role[8] they might take on as they read, for example, "an informed user of page design software who

[7] See, for example, Long (1980, 1990) and Ong (1975).

[8] For a discussion of some of the roles readers may take on, see Coney (1992).

wants to separate fact from hype" or "an expert in cold fusion research who is skeptical of faddish trends in scientific journal articles." *A key feature in the success of using the intuition-driven model of audience analysis lies in the communicator's ability to keep the internal representation or mental sketch*[9] *of the audience in mind during composing and to draw on it to create ideas that connect with and motivate their imagined readers.*

[9] Berkenkotter (1981) explores this issue in an interesting case study of the thinking that underlies the work of a professional editor.

The literature from the writing and graphic design communities that speaks to the intuitive model stresses the communicator's personal creativity in invoking a reader through textual cues and conventions. However, the literature is quite vague about how communicators actually do this. Much of the literature in graphic design, for example, treats intuition as an inexplicable personal trait and seems to valorize the idea that the creative process can't be characterized. Take the following extended quote from eminent graphic designer Paul Rand (1993) as an illustration:

> [T]here is really no one definition of intuition. For the sake of this chapter ["Intuition and Ideas"] we can settle on: a flash of insight. Intuition cannot be willed or taught. It works in mysterious ways and has something to do with improvisation. It has nothing to do with intentions.... It simply happens—an idea out of the blue—characterized sometimes by surprise, elation, and a release of tension. Intuition is conditioned by experience, habit, native ability, religion, culture, imagination, and education, and at some point, is no stranger to reason.
>
> The question is really less a matter of *experiencing* than of *listening* to one's intuitions, following rather than dismissing them.... The ability to intuit is not reserved to any special class of individuals, although many painters, writers, designers, dancers, or musicians believe that this ability is something special, something God-given.... Except in a most general sense, one cannot prove the validity of color, contrast, texture, or shape.... This is one of the reasons it is so difficult to understand or teach art.... The designer works intuitively.... There is always an element of choice, sometimes called good judgment, at others good taste.
>
> Aside from practical considerations, in matters of form the typographer must rely on intuition. How else does one select a typeface, decide on its size, line width, leading, and format? The alternatives are to repeat one's previous performances, to imitate what others have done, or simply to make arbitrary decisions. (pp. 45–47)

Rand portrays a romantic vision of design: that art cannot be taught, that artistic talent comes from God, that intuition somehow just happens, and that artists cultivate good taste.[10] Rand is hardly alone in the design community. An ample literature likens good design to good choreography. A good designer (or typographer) is someone who has an intuitive sense of when to use which move—when to be graceful and delicate, when to be rough and raunchy, or when to be witty and playful. Judging from its dominance in the literature, intuition-driven audience analysis continues to hold enormous appeal for the graphic design community.

The strength of intuitive models is that they capture, in ways that other models do not, the phenomenon that skilled communicators are good at "doing things with words and pictures" that get the audience's attention and keep it—that good communicators are sensitive to visual and verbal rhetorical moves that resonate[11] with readers. The limitation of intuitive models is that they lead document designers to not question the adequacy of their own judgments about the reader. Intuitive models do not encourage document designers to check their imagined reader against a real reader. In fact, the only test of effectiveness for the intuitive model is the document designer's personal review, during which he or she might say "Yes, it reads the way I intended" or "No, that's not quite what I was trying to visualize." Intuitive models don't help communicators to discriminate ideas that will actually resonate with readers from those which will fall flat (or that resonate only for themselves or their clients). Just how professionals get to the point where they can readily make wise or rhetorically sophisticated choices while imagining the reader remains enshrined in mystery, perhaps not so surprising for a model of audience built on intuition.

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[10] Young (1980) provides an illuminating discussion of the romantic tradition in modern thought about writing. He suggests that writers who hold the romantic view believe that the composing process should be free of deliberate control (what Rand calls intentions), that the act of composing is a kind of mysterious growth fed by what Henry James called "the deep well of unconscious cerebration" (1934, pp. 22–23). "Above all, this view insists on the primacy of the imagination ... [in] the mystery of language ... [in] art as magic" (pp. 343–344). As I discussed in Chapter 2, the romantic view holds that writing cannot be taught, that good writers are born with the right stuff, and that with the right stuff they can (as Rand tells us) cultivate good taste. Winterowd (1994) tells us that the romantic view of acquiring taste means that "some people are just genetic slobs and there's not much we can do about them" (p. 22).

[11] Meggs (1992a), for example, describes the nature of graphic resonance. He says that graphic designers bring a resonance to visual communication through the interaction of the connotative qualities of type and images and the expressive power of the visual vocabulary, that is, color, shape, texture, and the interrelations between forms in space (p. 117).

Feedback-driven Audience Analysis

Feedback-driven audience analysis provides a view of real readers engaged in the process of interpreting texts. Studies of readers-in-action show in considerable detail that audiences come to texts with knowledge, needs, values, and expectations that dramatically influence how they interpret what they read. The image of the audience that emerges from feedback-driven methods is of people who engage with documents in order to understand, access, and use them for pragmatic purposes.

The literature that speaks to feedback-driven audience analysis comes from two broad research traditions. One is from disciplines that focus on how people read and interpret text—such as reading comprehension, cognitive psychology, psycholinguistics, discourse analysis, and linguistics. Researchers working in this tradition have been characterizing in rather precise ways what readers do (e.g., their cognitive and linguistic moves) in making sense out of visual or verbal language. A second tradition has been developed by fields that focus more on how people read and interpret texts in particular contexts (e.g., professional, institutional, organizational, technological). Researchers in areas such as rhetoric, document design, technical communication, human factors, ergonomics, organizational behavior, cultural studies, sociology, anthropology, and the rhetoric of science have provided a view of people as they interpret messages directed at them (whether spoken, on paper, or on a screen).

Researchers in these fields stress the importance of studying the impact of the situation on the audience's interpretation. They suggest that document designers need to "catch the reader in the act" of interpretation by listening to them as they use prose and graphics in everyday situations (van der Meij, 1994). Feedback-driven audience analysis has been especially important in developing empirical methodologies for evaluating the design of artifacts—textual or otherwise.[12] These methods offer document designers ways of collecting quantitative and qualitative information about people's thinking and feeling as they engage with texts and technology. Feedback-driven accounts of audience have become increasingly concerned with studying communication as it unfolds in real time.

As *The Timeline* in Chapter 2 shows, during the 1980s and 1990s "understanding the user" gained worldwide attention from professionals working in usability testing, human-interface design, and user-centered design of products.[13] This trend led many professionals away from the traditional way of testing the quality of texts or technology, that is, by "crash testing" them on the audience after they were finished. Instead, professionals invited the audience to participate in evaluating their documents or products, in what has been called *participatory design*.

[12] A number of books and articles describing practical methods for assessing the quality of documents and products are available for newcomers to feedback-driven audience analysis (e.g., Dumas & Redish, 1993; Landauer, 1995; Nielsen & Mack, 1994; Rubin, 1994; Schriver, 1989a, 1991a; Schuler & Namioka, 1993; Schumacher & Waller, 1985; Suchman, 1987; U.S. Department of Health, 1984; Velotta, 1995.) For a bibliography of source materials about usability testing, see Ramey (1995a).

[13] For a view of user-centered design, see Casey (1993); Duffy, Mehlenbacher, and Palmer (1992); Duffy and Waller (1985); Landauer (1995); Norman (1988); Norman and Draper (1986); Redish (1985); Shneiderman (1987); or Wright (1980).

Professional communicators who employ feedback-driven audience analysis begin by thinking about ways to bring the audience into the design process in order to draw on their ideas to guide invention. A working assumption in using feedback-driven methods is that the audience should be part of the document design process as early and as often as possible during planning and revising. A second assumption is that as one elicits feedback from the audience, one is considerate, unobtrusive, and honest. Document designers rightly worry about the influence of their presence on the reader's interpretation. Feedback-driven approaches stress listening as carefully and as empathetically as possible, taking care not to assume the stance of judge or critic. Readers who provide document designers with feedback should be made aware that it is the text or the technology under evaluation and not their intelligence, their reading ability, or their cleverness in using technology. In responding to the audience, document designers try to do more of what readers like, while at the same time finding ways to solve problems readers may experience.

Like intuition-driven models of audience analysis, feedback-driven models operate dynamically. That is, the mental image communicators construct about the reader is used interactively during writing and design. *The key difference between intuition-driven models and feedback-driven models lies in how the image of the reader is built—on where ideas about the reader come from. Intuitive models of readers spring from the document designer's imagination, while feedback-based models derive from representations of real people.* Seeing the audience engage with prose or graphics allows document designers to build a mental representation of the reader which can be brought to bear during writing and design. By representation I do not mean a mirror-image rendering of the reader; document designers using feedback-driven audience analysis still consolidate their impressions of readers, still interpret their readers, still imagine them, and yes, still fictionalize them.

A strength of feedback-driven models is that the representation a document designer forms about the audience is likely to be much more oriented toward real people reading and comprehending than it would be if the document designer were using other models. *Feedback-driven models allow document designers to get a detailed view of how particular people interpret sentences, paragraphs, illustrations, diagrams, and so on. Watching people read provides firsthand insight into what makes documents easy (or hard) to understand. Listening to readers also alerts document designers to the differences among readers and to differences between readers and themselves.* Communicators who have observed someone trying to untie their tortured prose or decipher their use of "way cool" layered typefaces are more likely to have a better sense of the moments in the creative process when they should resist their writer-centered or graphic designer-centered tendencies. This is quite a

different view of the audience than one can glean by classifying or imagining people. Indeed, document designers can classify or imagine their audience and never once think of someone tripping over sentences. Instead, their attention is directed toward imagining readers engaging with the ideas they are supposed to *take away* from the text. The classification-driven and intuition-driven models tend to ignore the very real fact that what people take away from text depends on their process of interpretation—processes which may differ from those of the document designer.

A weakness of feedback-driven models is that like the other models, there is still a gap between forming an image of the audience and taking action based on that image. Feedback-driven methods can provide communicators with a veritable mountain of data to sort through. Not all of it is relevant. Not all of it will lead to improvement in the text. Some of the things members of the audience may say are idiosyncratic; others are just plain weird. Up to this point, however, there has been almost no research on how document designers move from the data they collect (e.g., during usability testing) to interpretations about those observations and then to revisions that reflect those interpretations. We need to know much more both about how to interpret what readers may say about prose and graphics and about how to take action on those interpretations.[14]

[14] I provide examples of how document designers may move from collecting readers' interpretations about prose and graphics to making audience-sensitive revisions in Chapters 5, 6, and 7.

Classifying, Imagining, or Listening: The Collision of Ideas about Audience Analysis?

Theories of audience analysis suggest that experienced professionals may analyze their audience in different ways—classifying them, imagining them, or listening to them. Although some of the literature argues implicitly or explicitly for one model or another, these visions needn't be viewed as being on a collision course. Instead, they can be used alternately, depending on what the rhetorical situation calls for.[15] Experience in document design can enable professionals to develop their sensitivity to moments in the creative act when it may be appropriate to shift gears and redirect their attention, using one vision of the audience or another. Experience also provides insight about how to employ these models interactively—that is, moving back and forth, for example, between imagining and observing the reader, allowing a model of the real reader to anchor the reader imagined, while at the same time calling on the document designer's personal creativity and intuition to help make design moves that resonate.

[15] Compare, for instance, the depictions of audience found in the writings of Berkenkotter (1981), Coney (1987), Ede and Lunsford (1984), Elbow (1987), Flower (1979), Iser (1978), Lunsford and Ede (1996), Park (1982), Roth (1977), Selzer (1992), and Young, Becker, and Pike (1970).

Experience in document design also helps professionals learn to recognize when they need to put off thinking about the audience[16] and

[16] For a discussion of when it may be appropriate to ignore the audience, see Elbow (1987).

To create effective communications—ones that are sensitive to the needs of audiences—document designers must understand how readers might think and feel as they interact with documents. They must anticipate what their audiences need and expect. Although these ideas are hardly new to experienced professionals, just what they mean has been difficult to translate into action. Over the last few decades, members of the reading and writing communities have been trying to better understand what readers "do with texts" and how communicators can be more sensitive to readers' needs. Much has been learned (I outline these developments in the next section), but we don't yet know the whole story. We still have theoretical and practical problems in making connections between audience analysis and textual choice, in linking what readers may need or expect with textual moves that use those analyses to improve the design of prose and graphics.

In this chapter, I explore these issues, paying particular attention to the interactive role that cognition and affect play in interpretation. I do so by

- Presenting an analysis of readers' thoughts and feelings as they engage with documents, showing how interpretation may be influenced by attitudes, values, knowledge, experience, age, race, class, or culture (an analysis continued in the remainder of this book)
- Reflecting on possible differences between document designers and their readers that may make it difficult for communication to take place
- Showing that readers form impressions not only of what a document says, but also of who they believe may be presenting the message, of the people or organization they imagine delivering the content (i.e., the persona, the organizational identity, or the corporate voice)
- Demonstrating that when document designers analyze the audience, the model of the reader they construct matters a great deal

ANALYZING THE AUDIENCE: COMPETING VISIONS

Imagine the following scenario:

> Three document design teams are given the task of revising an article on "global warming" from *Scientific American* so that it meets the needs of a junior high school audience. The original article, aimed at college-educated adults, presents ideas in prose and reinforces them with technical illustrations and graphs. The goal of the revision is to redesign the article so that it informs boys and girls

concentrate on their own understanding of the subject matter about which they are writing or visualizing. Document designers frequently work with subject matters that are new to them, requiring them to learn about the topic from scratch. These situations call on document designers to get the content straight for themselves before imagining or observing how someone else may understand it. Working with the subject matter allows document designers to develop a better understanding of it. The act of writing or designing may also inspire them to see new relationships, make fresh connections, and develop a better plan for the document. As document designers write or design, they form a mental representation of the text itself, a working image of its content, its structure, of what the text says so far. In a real sense, the "text produced so far" provides cues about how well the design is going (see Hayes & Flower, 1980). Each time document designers review their prose or graphics, the text itself speaks to them.

With experience, professionals learn to gauge for themselves when to listen to the text and when to listen to the audience. They become more responsive to the rhetorical situation, alternately working out the content—getting it straight—for themselves, classifying readers with special needs and interests, invoking readers they hope to converse with through the text, or listening to the flesh-and-blood people who may actually use their document. In this way, professionals develop a good sense of timing, calling on the right audience model at the right time and turning it off at the right time.

ANALYZING AUDIENCES/ANALYZING OURSELVES

As we have seen, there are considerable differences among the three approaches to audience analysis I just discussed. However, all three agree on an important point: Audience analysis should include a comparison of the communicator and the audience, an assessment of their respective knowledge, values, and beliefs about the subject matter. A comparative analysis can put document designers in a more informed position to make visual and verbal decisions that may bridge the gap between themselves and their audience. Young, Becker, and Pike (1970) put it this way:

> The writer frequently takes too much for granted, assuming that merely by speaking his mind he can change the reader's. If he fails, however, to utilize available bridges or to create new ones, his writing will not be effective. Thus it is not enough that bridges exist; they must be used—and therein lies much of the art of rhetoric. (172)

A comparison of perspectives may help document designers to see more clearly—in sometimes startling ways—that documents routinely present points of view that are neither anonymous nor objective. Indeed, all documents—whether they are designed to move, please, inform, or teach—project the knowledge of a knower, of an interested party. As Eagleton (1983) comments,

> There is no possibility of a wholly disinterested discourse.... All of our descriptive statements move within an often invisible network of value-categories, and indeed without such categories we would have nothing to say to each other at all.... [Our] interests are *constitutive* of our knowledge, not merely prejudices which imperil it. [italics in original] (pp. 13–14)

By exploring differences between themselves and their audience, document designers can become more reflective about the biases that can be created by knowledge and values. Such an awareness can make them more considerate of the reader's perspective, allowing them to generate ideas about how to address the differences between them and their readers. However, as I will show later in this chapter, there are cases in which the communicator and the audience live in such different worlds that the gaps between them may not easily be bridged. The audience, for example, may make radically different assumptions about why the document was written and about whose interests were meant to be served by the selection of content.[17] In the remainder of this chapter, I discuss what people do in choosing whether to read documents and how thinking and feeling come into play as they make these decisions.

[17] This is especially true with persuasive documents in the domain of risk communication and public policy. A few years ago, risk communicators from Los Alamos National Laboratory in New Mexico (the place where the atom bomb was built) carried out a mock town meeting in which they showed how difficult it is to change people's minds through documents when your organization is known "as the company that brought you the seven-eyed trout" (Durbin, Wahl, Molony, Klein, & Wade, 1993).

TO READ OR NOT TO READ: WHY BELIEFS MATTER

The first decision people make when confronted with a document is whether or not to read. Anecdotal evidence suggests that many people prefer not to read at all unless they have to. People learn quickly that reading documents—whether they are textbooks or tips on investments—takes effort. Redish (1993) points out that people read as much as they think they have to and no more. If a document "puts us off" when we first look at it, the likelihood that we will read it closely is greatly reduced. In some situations, such as filling out income tax forms, we are forced to read every word no matter how ugly the text seems. In most situations, however, we choose not only *whether* to read, but also *how* to read.

Many people find they must do a lot of reading on the job, making it essential for them to adjust their reading processes to the task at hand. For

example, a 1986 study of 150 research and development companies found that managers spend roughly 30 percent of their time reading documents such as research reports, memos, proposals, or technical articles (Sageev, 1994, p. 143). Similarly, in another study, managers at Exxon were found to spend an average of 35 percent of their time dealing with documents (Paradis, Dobrin, & Miller, 1985). Some managers of Fortune 500 companies have reported coping with as many as 142 pieces of mail in one day (Mintzberg, 1975). Obviously, with reading loads this high, managers need to reduce the time they spend dealing with documents and develop strategies for getting to the main points without reading the details. As Wright (1988b) has argued, we need to develop theories of NOT reading as well as theories of reading—theories that explore people's motivation for reading some documents carefully while ignoring others completely.

Since not all reading is of equal importance, skilled document readers develop ways of sizing up the material to be read—deciding what to browse, skim through, examine with full attention, or skip altogether. Skilled document readers behave opportunistically, getting what they want from documents and no more (as long as the document is designed in ways that make it convenient for them to do so). Although there is considerable informal evidence that individuals employ a range of strategies when dealing with documents, only recently have researchers started to explore how people make decisions about reading and using texts.

Researchers are just beginning to study how the particular situation or context shapes what people do when they read. Although there is widespread agreement that old models which assumed that individuals read in the same way across situations are wrong—in fact, dead wrong—we still have little empirical evidence about how the context influences what people do. Much of the early work on reading was done in university labs where college students were asked to respond to short narratives rather than to lengthy documents with real rhetorical functions such as informing, teaching, or persuading. Student participants in these studies were usually asked to carry out contrived tasks rather than their own tasks and imagine that they had the researcher's purpose in mind while reading.[18] Recently, researchers have begun to conduct naturalistic studies that explore reading and composing processes in everyday situations (see, for example, Stratman's 1990 study of court clerks interpreting legal briefs, Dauterman's 1993 study of nurses revising hospital documents, Mirel's 1989 study of office workers avoiding the use of computer manuals, Charney's 1993 study of biologists interpreting scientific writing, or Ackerman and Oates' 1996 study of architects using visual images to solve design problems). Studies of the reading habits of scientists, for example,

[18] Dumas and Redish (1993) point out that evaluating tasks from the user's perspective rather than from the manufacturer's perspective is crucial. Companies often discover that once they release a product, customers use it in ways they did not anticipate (which may contribute to the rise in third-party documents, for example, *DOS for Dummies*.) Document designers need to study users as they carry out their own tasks in their own environments in real situations and not simply document the tasks that the company's engineers find interesting.

have found that scientists typically read articles in professional publications in the following way:

> First they read the title and the abstract. Then they look for the most important data, usually in graphs, tables, drawings, and other visual aids. Next they typically read the Results section. (Berkenkotter & Huckin, 1995, p. 30)

Berkenkotter and Huckin note that this pattern is "strikingly similar to that displayed by newspaper readers ... [in which people] look for the most surprising, most newsworthy information first (i.e., the headline statement). Then, if interested, they read further...." (p. 31). Their research offers observation-driven support for the use of a "conclusions first" organizational structure in articles and proposals. Document designers should frame their texts so that the main points are presented "upfront" in a brief and engaging way; they should avoid recapping the inductive process of discovery that may have led to their scientific claims. As Harmon and Gross (1996) point out:

> Readers of scientific articles are an impatient lot. Of those who read the title and byline, only some will peruse the Abstract. Of those who read the Abstract, still fewer will read the Introduction. Many will skip from either the Abstract or the Introduction to the Conclusion.... And some will jump from the front matter directly to the reference list to see if their name was cited. (pp. 62–63)

What we know now is that most people choose to read and to keep reading only when they believe there will be some benefit in doing so and only when they cannot get the same information in easier ways (for example, by asking someone else). In order to help readers recognize the documents (or the sections thereof) that deserve their consideration, document designers must do at least two things. They must visibly structure the document so that the main ideas catch the attention of busy readers. At the same time, they must use language (both visual and verbal) that connects with the readers' knowledge, experience, beliefs, and values. The examples I present in this chapter show how this can be done and how hard it is to do well.

THE DOCUMENT DESIGNER'S DILEMMA: BALANCING THE READER'S NEEDS AND THE ORGANIZATION'S NEEDS

Up to this point, I have been talking as though the intended audience is the only group of readers document designers need to worry about. But as experienced professionals know all too well, there are other important

readers of documents besides real audiences, imagined readers, or end users—namely, the people who sponsor the document (e.g., the boss, the client, the manager) or those who distribute the document (e.g., gatekeepers,[19] marketing groups, teachers, sales personnel, bureaucrats). Unlike creative writers who get to compose exclusively for themselves, invoking imagined audiences when the mood strikes them, document designers must negotiate among the needs of multiple real audiences—juggling allegiances, mindsets, and agendas of competing stakeholders.

Part of being an expert in document design[20] means being able to write and design a single document that will satisfy the needs of multiple audiences. For example, when creating texts intended to persuade, document designers need to develop ideas in ways that show readers their perspective has been understood and represented fairly. At the same time, document designers must orchestrate the visual and verbal content so that it encourages readers to seriously consider the position put forth through the document, a position held by the sponsoring organization, even if it is as mundane as "use our equipment in this way." It would be naive to believe that organizations that sponsor document design do so without particular aims (e.g., educational, informational, political, or economic). The document must meet their needs and reflect their values (in effect, create an identity for them) as well as those of readers. This rhetorical situation—in which document designers must take into account the readers' knowledge and values while at the same time furthering the goals of an organization—is one that professionals deal with often. The study below illustrates how difficult it can be to strike the balance between readers' needs and the organization's needs. It shows how document designers are sometimes stuck in the middle.

[19] Gatekeepers are people who control access to information and who, in some cases, have the authority to require revisions of documents before they are released to the intended audience—people such as school board members, health authorities, supervisors, budget officers, personnel officers, corporate legal teams, military strategists, or public relations managers.

[20] The nature of expertise in document design is an important topic that needs much more exploration.

"JUST SAY NO TO DRUGS" AND OTHER UNWELCOME ADVICE: TEENS SPEAK OUT

Recently my colleagues and I[21] studied a context in which good writing and visual design have the potential to make an important difference: the design of drug education literature. We were concerned with how teenage audiences interpret brochures intended to discourage them from taking drugs, and more broadly with how readers may respond to the visual and verbal messages presented through brochures that aim to inform and persuade. We felt that the area of drug education literature would provide a challenging rhetorical situation to study because it is a context in which the audience's knowledge and values may stand in stark contrast to those of professionals employed to write and visualize the documents. Professionals who design drug education literature typically differ from

[21] My collaborators in this study were John R. Hayes and Ann Steffy Cronin. We gratefully acknowledge the sponsor of this research: The National Center for the Study of Writing and Literacy under the administration of the Office of Educational Research and Improvement (OERI), U.S. Department of Education. We also thank Patricia Chi Nespor and Michele Matchett for their contributions in the early phases of this project. An early version of this study appeared in Schriver, Hayes, and Steffy Cronin (1996).

their audiences in age, in point of view, in experience with drugs, in education, and sometimes in race, culture, and social class. Designing documents that communicate across these social and cultural boundaries is complex because professionals may have difficulty in anticipating how someone who may be quite unlike themselves will interpret their ideas.

Furthermore, even when professionals are good at "getting on a level" with their readers, the organization sponsoring the document may constrain the "voice" document designers can create by controlling (and in the worst cases, censoring) what may be said or illustrated.[22] This study showed us how critical it is to consider the possible interactions and conflicts among the values of the document designer, the organization, the gatekeepers, and the intended audience. It also made us aware of how important it is to learn about what audiences believe and value by listening to them as they interpret documents.

Where Our Research Team Started

We began by collecting over 100 brochures and handouts from national and local drug prevention agencies.[23] Many of these materials were funded by U.S. taxpayer dollars or through grants to nonprofit organizations during the Reagan administration. From this collection, we selected a

[22] Consider the U.S. government's abysmal track record in designing effective brochures about AIDS prevention. The first brochure from the Surgeon General that was mailed to all households in the U.S. failed to include the word "condom" because conservatives thought its use encouraged sexual activity. Unfortunately, almost 10 years later, the design of AIDS brochures continues to be perverted by political agendas. For example, the *New York Times* (Berke, September 13, 1995 and September 17, 1995) reported that when Senator Bob Dole decided to make a bid for the 1996 presidential election, his wife, Elizabeth Dole, president of the Red Cross, called a halt to the release of already-designed AIDS brochures to be distributed nationwide. The reason was that the illustrations were too explicit about how to put on a condom. Although writers could use the word "condom," illustrators had their hands tied regarding the type of drawings to make. Illustrators had wisely chosen to depict realistic images of people putting on condoms. But out of fear that these drawings could be construed as sanctioning illicit sex, illustrators were sent back to the drawingboard to make more technical, medical-looking illustrations. The consequence was the wrong revisions implemented for the wrong reasons. As this study will show, teenage readers tend to "tune out" illustrations that look like they came from their biology textbooks.

[23] Agencies such as the U.S. Department of Health and Human Services, the National Office for Substance Abuse Prevention, the National Crime Prevention Council, the Do It Now Foundation, Campuses Without Drugs, and the Pittsburgh Police Drug Abuse Resistance Education (DARE) Program. Our research team respects these organizations for their continued excellent efforts to communicate effectively with their intended audiences. Our goal was not to criticize the work of these organizations, but to better understand how readers respond to drug prevention literature in order to improve it.

subset of brochures intended for a junior high school, high school, or college audience. Among the brochures we studied were the following:

- *Don't Lose a Friend to Drugs*
- *Here Are Some Snappy Answers to the Question: Want Some Alcohol or Other Drugs?*
- *Smokeless Tobacco: It's Not as Safe as You Think*
- *Crack: Cocaine Squared*
- *Crack: The New Cocaine*
- *Ice: Crystal Methamphetamine*
- *Pot: A Guide for Young People*
- *Marijuana: Health Effects*
- *The Effects of Alcohol*
- *Inhalants*
- *Facts About Anabolic Steroids*

To learn about how these documents were designed and interpreted, we looked at the situation from three perspectives:

- Teenagers' interpretations of messages directed at them through the brochures
- Gatekeepers' (e.g., teachers or guidance counselors)[24] opinions about what they look for in drug prevention messages, particularly in brochures
- Document designers' ideas about what they were trying to do in creating the drug prevention messages (and what the organizations they worked for were trying to do)

I now describe what our research team did and what we found out about these perspectives.

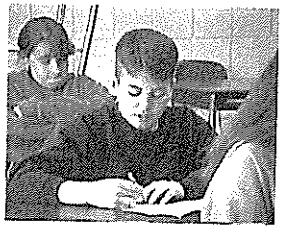
Exploring Teenagers' Interpretations of Drug Education Literature

We investigated students' responses to the drug education brochures by asking them to participate in focus groups, surveys, and one-on-one interviews, or to provide think-aloud reading protocols.[25] A total of 297 students from western Pennsylvania, West Virginia, and eastern Ohio, ranging in age from 11 to 21, took part in the project.[26] These students came from diverse educational settings: inner-city and suburban junior high schools and high schools, private prep schools, parochial schools, community literacy centers, karate schools, business schools, vocational-education schools, and private colleges.

[24] In the context of drug education literature, gatekeepers disseminate communications such as brochures or public service announcements, choosing which brochures get put in waiting rooms, counselors' offices, and the like. Gatekeepers exert influence over whether audiences ever see the communications its organization may have bought, commissioned, or received from other organizations. For a discussion, see the U.S. Department of Health (1984).

[25] For readers of this book who are not familiar with these methods for evaluating texts, I recommend reading the sources mentioned in footnote 12.

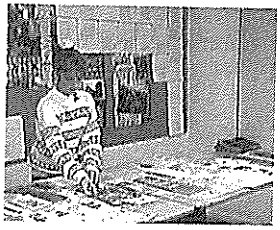
[26] Special thanks to the teachers and students at Pittsburgh's Gateway Technical Institute, Riverview High School of Oakmont, the Community Literacy Center of Pittsburgh's Northside, the Jewish Community Center of Squirrel Hill, the Baptist Youth Group of Allegheny County, the Defense Tactics Institute of West Virginia, the Karate School of Pittsburgh, Robert Morris College, Carnegie Mellon University, Westinghouse High School of Pittsburgh, Shadyside Academy of Fox Chapel, and Carlynton Junior High of Rosslyn Farms, Pennsylvania.



We chose our methods for collecting data—surveys, think-aloud protocols, interviews, and focus groups—with several goals in mind. In particular, the surveys were designed to evaluate students'

- Understanding of the facts about the drugs (e.g., how many times can a person smoke crack before becoming addicted?)
- Opinions about the writing and visual design of the brochures
- Beliefs about the persuasiveness of the brochures

The think-aloud protocols provided a detailed view of students' sentence-by-sentence, picture-by-picture comprehension of the brochures. The interviews and focus groups elicited students' general impressions of the content presented in the brochures. With the permission of students, their parents, and their teachers, we videotaped the focus groups, interviews, and think-aloud protocols.



We visited classrooms where teachers allowed us to talk with their students for a few hours in the morning or afternoon. We began by asking students to read a drug brochure and then evaluate its quality by responding to a survey. From each class, we asked a few students to provide think-aloud reading protocols or to take part in one-on-one interviews while the other students read silently and filled in the survey. After the surveys, protocols, or interviews, the entire class participated in a focus group session, during which we prompted students to respond to the features of the brochures that struck them as effective or ineffective. We posed questions such as these:

Overall impression

- What is your impression of the brochure?
- What about this brochure makes you want to read it?
- If you saw this brochure on a rack in a guidance counselor's office, would you pick it up? Would you take it home?

Interpretation of the main ideas

- What ideas does the brochure tell you about?
- What are the main points of the brochure?
- Does this brochure help you make an opinion about its main points?
- Does this brochure change your mind about anything?

Impression of the visual design

- Do you like the way this brochure looks?
- What do you think of the pictures, tables, or diagrams?
- What about the appearance of this brochure catches your eye and makes you want to look it over?

Impression of the author

- Did you imagine an author when you read this?
- If you did imagine an author, what is the author like?
- Can you point to places in the brochure that make you feel this way?

Impression of the intended audience

- What does the author think the reader is like?
- Does the author have a point of view about the reader?
- Can you point to places in the brochure that make you feel this way?

Students told us several important things about the drug education literature: how well the writing "spoke" to them, how well the graphics and visual design worked, who they believed might have produced the drug literature, and who they thought the author was writing to. They also provided feedback regarding the effectiveness of the brochures, that is, would these documents actually have any effect on someone who is considering taking drugs?

Teenagers Respond to the Text and Graphics

Students' responses revealed that although most of the brochures were clearly written and visualized in terms of sentence structure, choice of language, and ease of understanding the graphics, they did not work very well for the intended audience. We found that students' interpretations developed partly in response to the main ideas of the drug education literature and partly from their perception of who they believed wrote the text and why. In general, students understood the facts about the drugs discussed in the brochures, that is, they had little trouble comprehending the main points. They also had few problems figuring out what the pictures were intended to represent, at least on a literal level; they could

readily see that a diagram of a heart was supposed to be a heart. But importantly, students' understanding of the main ideas and the intended meaning of the graphics did not appear to have much to do with whether or not they were persuaded by the document.

Students' interpretations of the "just say no" rhetorical stance often ran counter to the expectations of the organizations sponsoring the brochures. Students were quick to infer an authorial agenda in presenting the message, an agenda that document designers and the organizations they worked for may or may not have intended. Teenagers displayed considerable rhetorical sophistication in evaluating the text and graphics directed at them. They were astute in making inferences about the author and in identifying textual clues that suggested the author's beliefs about them. An examination of students' responses to several of the brochures vividly makes these points.

Don't Lose a Friend to Drugs (shown in Figure 3.1) is a trifold brochure aimed at middle school students and high school freshmen. Of the 90 students who evaluated this brochure, only two students liked it. One student remarked that the pictures in the brochure made the whole thing seem "too kiddy," and, as one ninth-grader said, "If I looked at the picture, I'd think it was for eight-year-olds and I wouldn't read it." Another told us, "If I saw this on a rack, I'd pass it by."

Some students zeroed in on how outdated the character portrayed in the brochure was; one student described him as "a seventies kind of guy," while another scoffed, "Is that [his hair] supposed to be an Afro? What a throwback to Jheri curl or my dad's Afro-sheen days." Students were insulted by the character's implied ethnicity; one asked: "Why is a black man on the inside in the middle? Why do they show black males in all these brochures?"[27]

[27] Interestingly, not all students in our study believed the picture in Figure 3.1 was of an African American. Interviews with writers on the document design team revealed that they were worried about the organization's choice of illustrator, reporting that "he always draws pictures of blacks that look like they're from that old TV show, *The Mod Squad.*"

Students' comments in the focus groups and think-aloud protocols showed they were accustomed to judging visuals, readily inferring meanings (intended or not) from the choice and design of graphics. Students remarked that many of the illustrations across the set of the brochures were "insulting," "corny," and even "pitiful." One student offered this sobering suggestion:

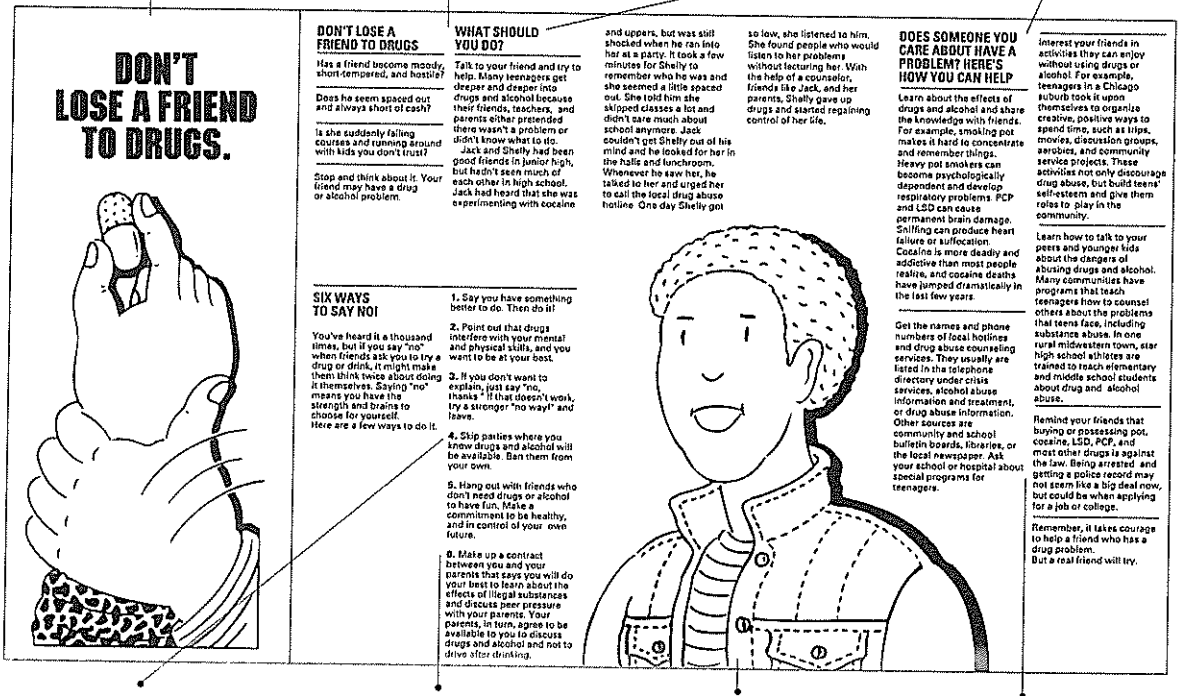
> I think they should take actual photographs of people on drugs. My friend's cousin is on drugs, well ... he just sits there and laughs.... That's how gone he is.... I think they should use pictures of people just looking into space. I mean that cover with the hand pulling away the other hand with the pill in it, that's just lame. The story is dumb. Give us some credit.

Some guy's trying to take a pill and another's trying to stop him. It's good but, it needs more detail and more colors to draw your attention to it … or a picture of a guy who's really messed up. As is, you're like what's up with this guy?

This sounds so typical … person uses drugs, person gets help, person gets life back on track. It's like whenever you get one of these pamphlets that's all it is. Person gets help at some center and he's OK. Tell about him dying or him destroying his life.

Maybe if you explain more facts about drugs or what they do to you. Or even when you're under the influence what kinds of things happen to you. Many teenagers don't know all the effects of drugs, so like you could tell true stories of what happened.

I think that you could just give them the facts and it's their decision whether they want to try them or not. You should like have a list of drugs and effects—just state the facts. This is too long, nobody's going to read it.



DON'T LOSE A FRIEND TO DRUGS.

DON'T LOSE A FRIEND TO DRUGS

Has a friend become moody, short-tempered, and hostile?

Does he seem spaced out and always short of cash?

Is she suddenly failing courses and running around with kids you don't trust?

Stop and think about it. Your friend may have a drug or alcohol problem.

WHAT SHOULD YOU DO?

Talk to your friend and try to help. Many teenagers get deeper and deeper into drugs and alcohol because their friends, teachers, and parents either pretended there wasn't a problem or didn't know what to do.

Jack and Shelly had been good friends in junior high, but hadn't seen much of each other in high school. Jack had heard that she was experimenting with cocaine and uppers, but was still shocked when he ran into her at a party. It took a few minutes for Shelly to remember who he was and she seemed a little spaced out. She told him she skipped classes a lot and didn't care much about school anymore. Jack couldn't get Shelly out of his mind and he looked for her in the halls and lunchroom. Whenever he saw her, he talked to her and urged her to call the local drug abuse hotline. One day Shelly got so low, she listened to him. She found people who would listen to her problems without lecturing her. With the help of a counselor, friends like Jack, and her parents, Shelly gave up drugs and started regaining control of her life.

SIX WAYS TO SAY NO!

You've heard it a thousand times, but if you say "no" when friends ask you to try a drug or drink, it might make them think twice about doing it themselves. Saying "no" means you have the strength and brains to choose for yourself. Here are a few ways to do it.

1. Say you have something better to do. Then do it!
2. Point out that drugs interfere with your mental and physical skills, and you want to be at your best.
3. If you don't want to explain, just say "no, thanks." If that doesn't work, try a stronger "no way!" and leave.
4. Skip parties where you know drugs and alcohol will be available. Ban them from your own.
5. Hang out with friends who don't need drugs or alcohol to have fun. Make a commitment to be healthy, and in control of your own future.
6. Make up a contract between you and your parents that says you will do your best to learn about the effects of illegal substances and discuss peer pressure with your parents. Your parents, in turn, agree to be available to you to discuss drugs and alcohol and not to drive after drinking.

DOES SOMEONE YOU CARE ABOUT HAVE A PROBLEM? HERE'S HOW YOU CAN HELP

Learn about the effects of drugs and alcohol and share the knowledge with friends. For example, smoking pot makes it hard to concentrate and remember things. Heavy pot smokers can become psychologically dependent and develop respiratory problems. PCP and LSD can cause permanent brain damage. Sniffing can produce heart failure or suffocation. Cocaine is more deadly and addictive than most people realize, and cocaine deaths have jumped dramatically in the last few years.

Get the names and phone numbers of local hotlines and drug abuse counseling services. They usually are listed in the telephone directory under crisis services, alcohol abuse information and treatment, or drug abuse information. Other sources are community and school bulletin boards, libraries, or the local newspaper. Ask your school or hospital about special programs for teenagers.

Interest your friends in activities they can enjoy without using drugs or alcohol. For example, teenagers in a Chicago suburb took it upon themselves to organize creative, positive ways to spend time, such as trips, movies, discussion groups, aerobics, and community service projects. These activities not only discourage drug abuse, but build teens' self-esteem and give them roles to play in the community.

Learn how to talk to your peers and younger kids about the dangers of abusing drugs and alcohol. Many communities have programs that teach teenagers how to counsel others about the problems that teens face, including substance abuse. In one rural midwestern town, star high school athletes are trained to teach elementary and middle school students about drug and alcohol abuse.

Remind your friends that buying or possessing pot, cocaine, LSD, PCP, and most other drugs is against the law. Being arrested and getting a police record may not seem like a big deal now, but could be when applying for a job or college.

Remember, it takes courage to help a friend who has a drug problem. But a real friend will try.

How about #4 of the six ways to say no, skip parties. Well, parties aren't the only place drugs are available. How about school and everyday life, so maybe we should start skipping school (giggles).

The sixth way to "say no" is corny … you'd say hey mom, how about a contract? She'd say, how about a slap? This looks like it was written by someone who's in some Washington office building all the time and never gets outside.

Oh that picture is so cheezy. Plus is he supposed to be black? Why are black men always shown in these brochures? I resent this crap! Like why is he smiling and why doesn't he have normal eyebrows … his jacket I mean, it's like gross. Is he supposed to be happy? They should get input from other young people.

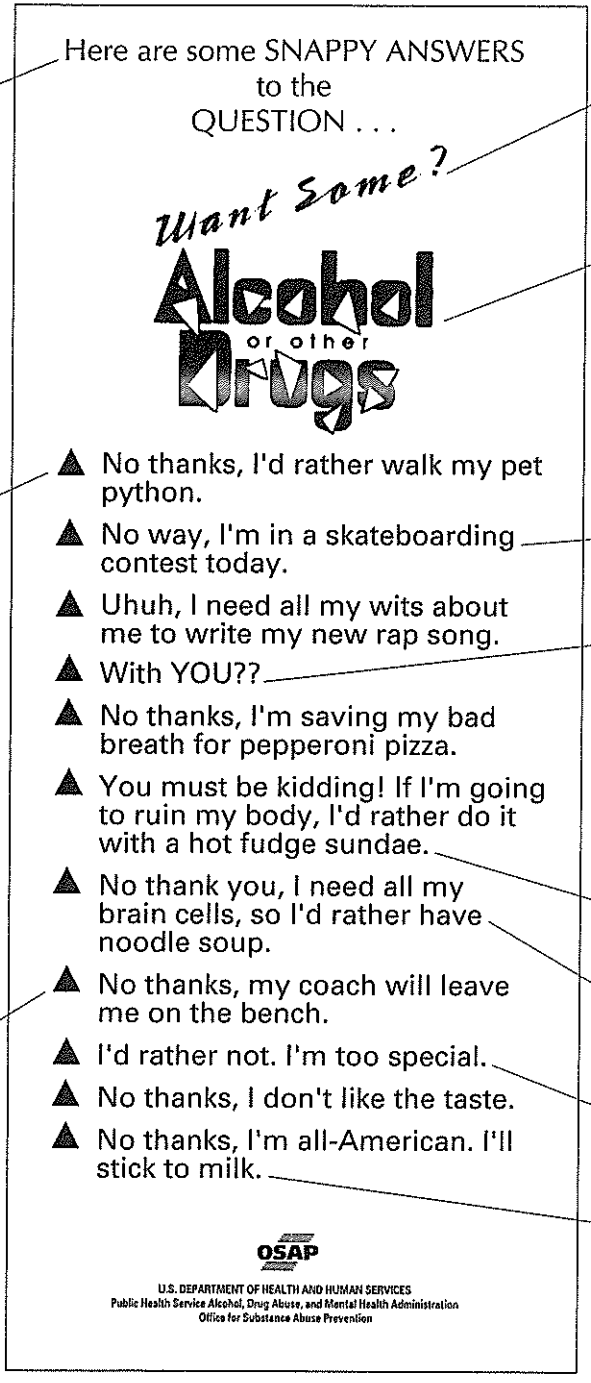
I think the part "If someone you know has a problem here's how you can help" is good because there's some abbreviations in there that catch your eye … PCP, LSD. I like that cause it makes you want to read it … maybe they could also tell true stories like how somebody on drugs gouged out their eyes.

▲ Figure 3.1 *Teenagers' responses to a brochure about helping a friend on drugs. Courtesy of The National Crime Prevention Council, Washington, DC.*

The title makes it sound like when you open this box the flyer asks you if you want some drugs or alcohol. Sick. And they don't say stuff we could really do, just "say no" with one of these "snappy" answers ... which are lame at best.

It sounds more like a joke. Some people would just say "not with you," but these say, "I have to walk my python (laughs)." These answers are kind of stupid. It sounds like the author is a nerdy white guy that was cooped up in his office too long. Maybe they should tell why taking drugs is bad. They could say blow-by-blow what happens to you.

This is aimed at kids pretty much because it says "No thanks, my coach will keep me on the bench." But, it's not very interesting. They should use more pictures ... if they really wanted to make an impact they should use pictures of a dead guy.



Nobody says "Want some alcohol or other drugs?" That "or other" sounds really weird.

What are these little triangles? Oh no, I guess this is supposed to be acid. Why do they use drugs to decorate the letters if they are not trying to make using drugs seem fun? It seems odd to me.

This one's OK, but I'd say "boarding."

This one's funny. You could say it like in a "smart" way. Like you could say it with an attitude. It's the only one I could say. The other ones would get you beaten up.

Get a grip! Only "goodie-goodies" talk like this.

Was this written by someone's grandma?

I like this one "I better not, I'm too special." NOT!

People never admit to drinking milk in front of friends. This is strange.

▲ Figure 3.2 *Teenagers' responses to a flyer intended to give them ways to "say no to drugs." Courtesy of the Office of Substance Abuse Prevention and the U.S. Department of Health and Human Services, Washington, DC.*

A one-page pamphlet, *Here are Some SNAPPY ANSWERS to the Question: Want Some Alcohol or Other Drugs?* (shown in Figure 3.2 on the opposite page), advises preteens how to "just say no" when offered drugs. At best, students found the idea of "snappy answers" dumb and condescending. Students ridiculed answers such as "No thanks, I'm all-American. I'll stick to milk"—identifying them as glaringly inadequate for coping with the reality of America's playgrounds and streets.

One student reasoned, "A pusher would have a more powerful comeback if someone was dumb enough to say one of these." Another student pointed out the danger of using inappropriate responses like "I'd rather have a hot fudge sundae," predicting "You'd get beat up if you said this." Students suggested that writers should "create a realistic scenario, maybe put themselves in a situation ... like a realistic play, but just don't have a hokey script." Rather than offering "snappy answers," students advised prompting teens to "really think about drugs and what can happen.... Make 'em really think about their lives."

Again and again, students pointed to differences between their perspective and the author's (that is, their inferences about the author). Some recommended bridging the gap by involving the audience directly in the document design: "We [the students] should write it.... We should have a say." Students seemed to have an implicit model of the benefits of usability testing and participatory design (see Schuler & Namioka, 1993). They felt that either "teenage drug users" or "kids who have had firsthand experience with someone who has had a problem with drugs" would reach the intended audience better because "adults can't really see."

Students were more impressed with *Smokeless Tobacco* (shown on the following page in Figure 3.3). They found the message compelling and were very positive about the author's attitude toward them as readers. They responded favorably to the author's "it's your decision" rhetorical stance. They thought the facts about what smokeless tobacco does to the body were effective and that imagining the gruesome effects made the topic real.

Although students liked the way the brochure was written, they criticized its ugly appearance. The original was printed on yellow-gold paper. Students thought the paper looked cheap and said that illustrations and graphics were needed "so you don't have to imagine what it looks like to have your mouth destroyed." As one student put it:

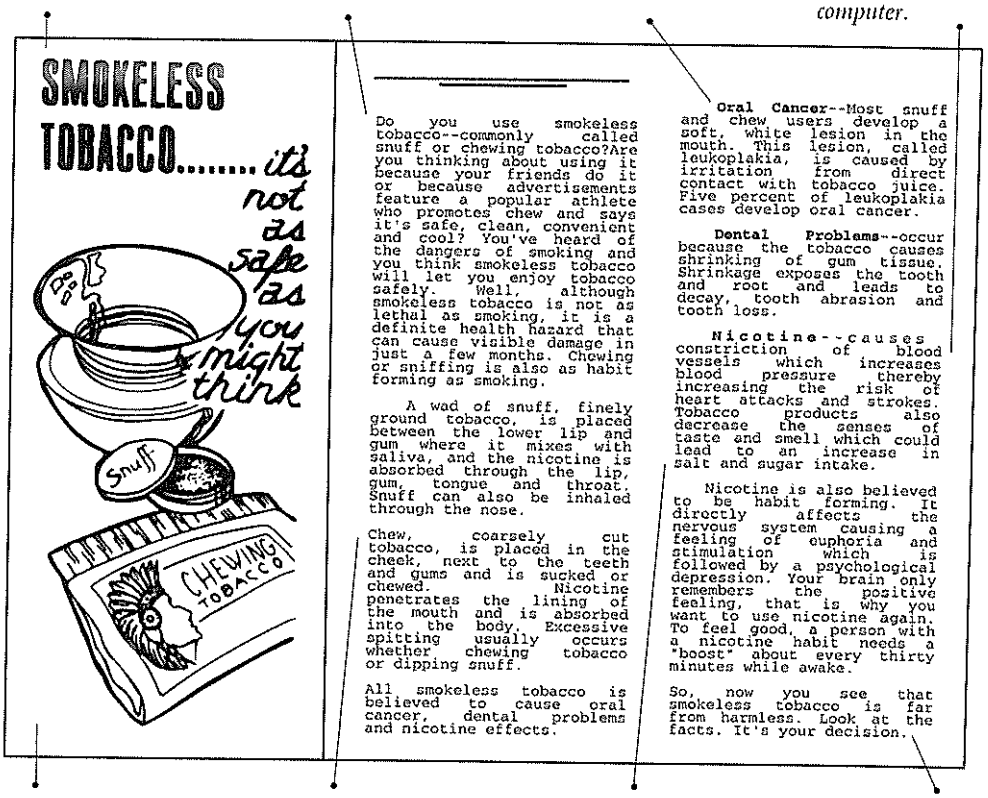
> I would include graphic pictures of actual tissue damage. This is what your mouth is going to look like in so many years ... you know, stuff that is going to make the kids cringe ... I think that might work.

Looking at the cover you don't get any idea of what this is about. The coffee cup and pouch don't have any effect on me. A little more color would be good. It reminds me of a Jehovah's Witnesses brochure and you always try to slam the door in their face.

I think that they should make this more interesting. If I picked this up and looked inside I wouldn't want to read it. It's a lot of writing all close together. They should put those bubbles around it like the ones in cartoons.

It is good that instead of just telling you that you can get oral cancer they describe it. White lesions—that sounds horrible, sickening … but a picture would be more convincing. The words have big spaces between them. Why is that?

These facts say there are chemicals in chewing tobacco that you don't think about being in there. That's good. People who do it think it's just a thing you put in your mouth. By the way, this brochure looks typed—like they used a really old typewriter. It's ugly. Get a computer.



SMOKELESS TOBACCO..... it's not as safe as you might think

Do you use smokeless tobacco--commonly called snuff or chewing tobacco?Are you thinking about using it because your friends do it or because advertisements feature a popular athlete who promotes chew and says it's safe, clean, convenient and cool? You've heard of the dangers of smoking and you think smokeless tobacco will let you enjoy tobacco safely. Well, although smokeless tobacco is not as lethal as smoking, it is a definite health hazard that can cause visible damage in just a few months. Chewing or sniffing is also as habit forming as smoking.

A wad of snuff, finely ground tobacco, is placed between the lower lip and gum where it mixes with saliva, and the nicotine is absorbed through the lip, gum, tongue and throat. Snuff can also be inhaled through the nose.

Chew, coarsely cut tobacco, is placed in the cheek, next to the teeth and gums and is sucked or chewed. Nicotine penetrates the lining of the mouth and is absorbed into the body. Excessive spitting usually occurs whether chewing tobacco or dipping snuff.

All smokeless tobacco is believed to cause oral cancer, dental problems and nicotine effects.

Oral Cancer--Most snuff and chew users develop a soft, white lesion in the mouth. This lesion, called leukoplakia, is caused by irritation from direct contact with tobacco juice. Five percent of leukoplakia cases develop oral cancer.

Dental Problems--occur because the tobacco causes shrinking of gum tissue. Shrinkage exposes the tooth and root and leads to decay, tooth abrasion and tooth loss.

Nicotine--causes constriction of blood vessels which increases blood pressure thereby increasing the risk of heart attacks and strokes. Tobacco products also decrease the senses of taste and smell which could lead to an increase in salt and sugar intake.

Nicotine is also believed to be habit forming. It directly affects the nervous system causing a feeling of euphoria and stimulation which is followed by a psychological depression. Your brain only remembers the positive feeling, that is why you want to use nicotine again. To feel good, a person with a nicotine habit needs a "boost" about every thirty minutes while awake.

So, now you see that smokeless tobacco is far from harmless. Look at the facts. It's your decision.

This cover is boring. A gruesome picture on the front would be an attention-getter. I saw a brochure with a picture of a guy who used chewing tobacco and his face was all destroyed—it was really gross. It was really effective. I'd never touch chew now.

I think sometimes just showing what it will do might show people how to use it. If the brochure tells what chew will do or where to put it in your mouth, kids will understand how to use it better. So if more people read this, more people might do it.

These facts are good. Even though you could say, "I use a brand that's not as harmful," you're still influenced by this message. It might even convince me more if there was a testimonial from a baseball player who used chew.

Here they say it is your decision—you can use chew and get cancer or you can ignore it and you won't. It's good that they're clear about giving you a choice. They respect us and think we have a mind! But they should show what it does to your mouth.

▲ **Figure 3.3** *Teenagers' responses to a brochure about the dangers of smokeless tobacco. Courtesy of the Allegheny County Health Department, Pittsburgh, PA.*

Some felt that a famous baseball player who had tissue damage should be featured (a strategy often used in videos about the dangers of drugs). A number of students thought that a well-known and respected spokesperson would add credibility to the brochures. Others felt the focus should be on making the tobacco companies "the enemy," arguing "they don't care about us ... they just want our money."[28] As one ninth-grade female said to another,

> Those tobacco companies don't care if we die, girl. But we're not the fools they make us be.

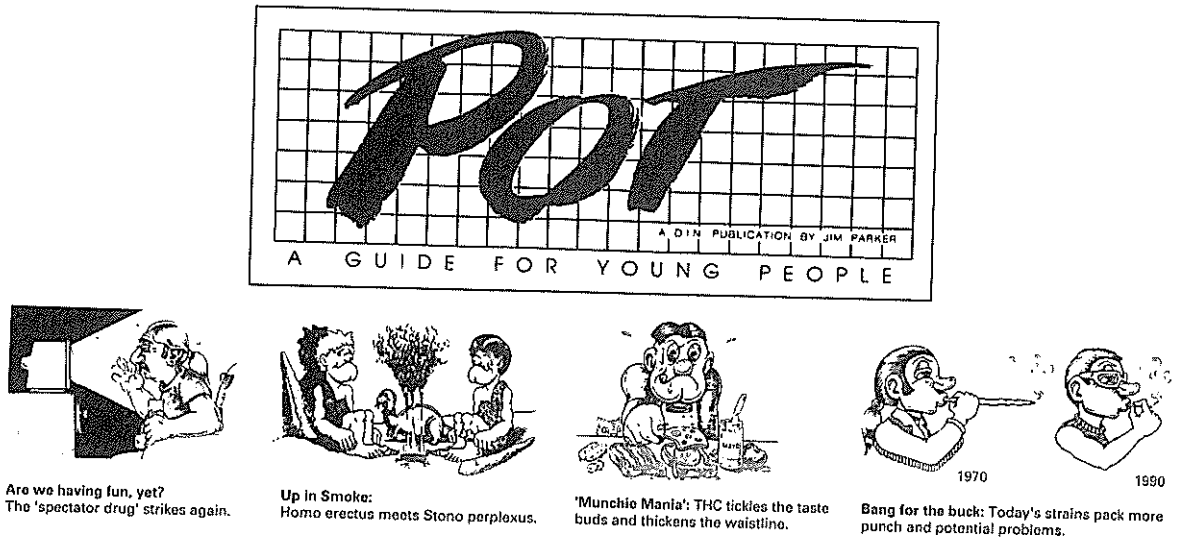
In addition to pointing out problems caused by the lack of illustrations in *Smokeless Tobacco,* students made judgments about its graphic design and typography. Students did not have insider language for graphic and typographic features such as layout, typeface, word spacing, kerning, leading, or format. But even so, they readily saw these features. As one student observed:

> Once you read *Smokeless Tobacco* you like it, but when you glance it over, you think, boy, this is really cheap looking. Look at the letters and the spaces there between the words, like it was done in somebody's basement. It's so ugly you don't want to read it. If you didn't ask me to read it, I wouldn't have ... even though I did like it.

In other brochures we tested, we found that students' interpretations of pictorial graphics, especially representational illustrations and cartoon-like line art, were influenced by associations they made between what was pictured and their personal lives. For example, in *Pot: A Guide for Young People* (part of which is shown in Figure 3.4 on the following page), students commented that the cartoons of a "stoned guy with the munchies watching TV" made pot smoking "look like fun." One student, a freshman in college, thought that it looked like an "ad for pot which featured the celebrities, Cheech and Chong, from those classic stoner films of the 1960s." To probe his interpretation further, we repeated his comments in our focus groups with junior high school students and were met with blank stares. Younger teens had never heard of Cheech and Chong. One eighth-grader asked, "who is this old guy with the long hair supposed to be? He's weird."

Members of the document design team may have been teenagers in the 1960s; the illustration style appears to be influenced by Robert Crumb of *Zap Comix*. Clearly, document designers need to be more aware that the same graphic can mean very different things to readers from different age groups. Readers' comments about the graphics made us realize the importance of paying attention both to the connotations of graphics and to their visual tone.

[28] By contrast, some students had not yet formed an opinion and seemed highly susceptible to messages directed at them. The twelve-year old boy pictured at the bottom left on page 170 (wearing a Kool cigarette T-shirt) said this as he read *Smokeless Tobacco:* "I guess I don't know what I think. If I read this and it shows me how to put it behind my lip, then I know how to use it. So some people might try it out. It says that the snuff is not as bad as the smoking..." Impressionable young people such as this boy seem likely targets of tobacco advertising. A survey in 1996 of teenage smoking by the Center for Disease Control indicated that 34.8 percent of high school students age 17 and under said they had smoked in the previous month, up from 27.5 percent in 1991. Says Dr. Michael Eriksen, head of the Center's Office on Smoking and Health, "teenage smoking is almost a mathematical function of adult disapproval" (Mansnerus, 1996). In August 1996, President Clinton announced new steps by the Food and Drug Administration to limit the marketing of tobacco to minors.



▲ Figure 3.4 *Pictures from a brochure intended to educate students about the effects of marijuana on the body. Reprinted with the permission of Jim Parker, DIN Publications, Tempe, AZ.*

Readers found the words and pictures in the brochure *Marijuana: Health Effects* (see Figure 3.5 on the next page) to convey mixed messages. Some students believed it simultaneously encouraged and discouraged drug use. On one hand, they thought the picture of the marijuana leaf on the cover was attractive and that it presented a positive image of the drug. One tenth grader commented: "you could wear the leaf on your T-shirt or cap." On the other hand, they thought the fact-like presentation of the health effects made using marijuana seem harmful. They thought the words and pictures were "out of sync."

Students' responses to *Marijuana: Health Effects* were unlike those to *Smokeless Tobacco* in that students who read the marijuana brochure thought the health effects were dull and unpersuasive while students who read about smokeless tobacco found the health effects fascinating and interestingly gory. Our research team got the impression that citing health effects might be persuasive if the teenager could look in the mirror and imagine himself or herself looking different because he or she used a particular drug. For example, students mentioned how turned off to drugs they would be if they looked in the mirror and saw rashes, pimples, blisters, canker sores, or swollen (or missing) body parts (as could be the case in an alcohol-related traffic accident).

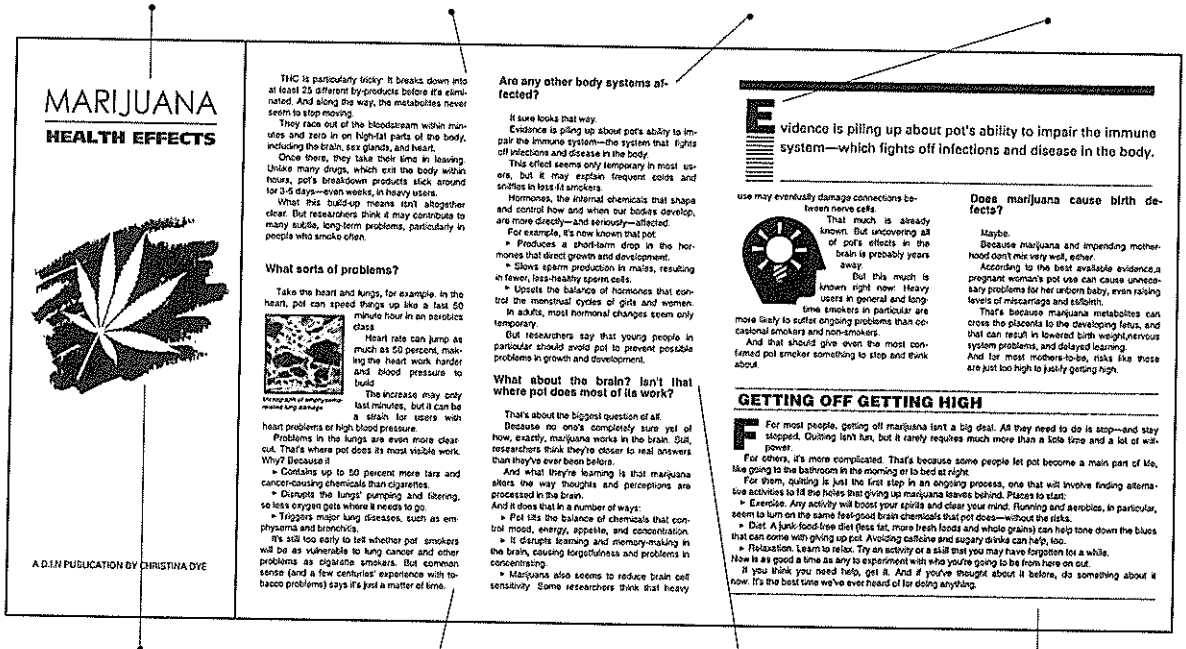
Alternatively, students "tuned out" almost immediately when the brochures depicted "inside the body" diagrams of the heart, lungs, or brain. This was especially so when the diagrams were of disembodied body parts such as line drawings of the heart, lungs, or brain. Several junior high school students mentioned that the pictures of body parts reminded them of their "boring biology books" or "Mr. Hall's health class."

To really get people's attention, show pictures of people who get high. Maybe little cartoon characters . . . well no, not actually the regular kind of cartoon characters. That would be dumb, but not black and white pictures, colorful pictures.

A lot of this writing won't have any impact. They should have a celebrity more in touch with kids telling them don't do drugs, like Madonna and show pictures (laughter). Well, maybe not Madonna but a celebrity—a heroine everybody could relate to.

This does not look interesting. I'd like to see the government come out with a brochure that is more on the offensive. Like how about showing a drug user as an astronaut to show how you can't do a good job if you're high.

This won't influence kids. Is this brochure aimed at parents? So parents can talk to kids? This medical stuff is boring. Who cares about the immune system? There should be more stuff parents could say to make kids care.



MARIJUANA

HEALTH EFFECTS

A D.I.N PUBLICATION BY CHRISTINA DYE

THC is particularly tricky: It breaks down into at least 25 different by-products before it's eliminated. And along the way, the metabolites never seem to stop moving.

They race out of the bloodstream within minutes and zero in on high-fat parts of the body, including the brain, sex glands, and heart.

Once there, they take their time in leaving. Unlike many drugs, which exit the body within hours, pot's breakdown products stick around for 3-5 days—even weeks, in heavy users.

What this build-up means isn't altogether clear. But researchers think it may contribute to many subtle, long-term problems, particularly in people who smoke often.

What sorts of problems?

Take the heart and lungs, for example. In the heart, pot can speed things up like a fast 50 minute hour in an aerobics class.

Heart rate can jump as much as 50 percent, making the heart work harder and blood pressure to build.

The increase may only last minutes, but it can be a strain for users with heart problems or high blood pressure.

Problems in the lungs are even more clear-cut. That's where pot does its most visible work. Why? Because it

- Contains up to 50 percent more tars and cancer-causing chemicals than cigarettes.
- Disrupts the lungs' pumping and filtering, so less oxygen gets where it needs to go.
- Triggers major lung diseases, such as emphysema and bronchitis.

It's still too early to tell whether pot smokers will be as vulnerable to lung cancer and other problems as cigarette smokers. But common sense (and a few centuries' experience with tobacco problems) says it's just a matter of time.

Are any other body systems affected?

It sure looks that way.

Evidence is piling up about pot's ability to impair the immune system—the system that fights off infections and disease in the body.

This effect seems only temporary in most users, but it may explain frequent colds and sniffles in less-fit smokers.

Hormones, the internal chemicals that shape and control how and when our bodies develop, are more directly—and seriously—affected.

For example, it's now known that pot

- Produces a short-term drop in the hormones that direct growth and development.
- Slows sperm production in males, resulting in fewer, less-healthy sperm cells.
- Upsets the balance of hormones that control the menstrual cycles of girls and women.

In adults, most hormonal changes seem only temporary.

But researchers say that young people in particular should avoid pot to prevent possible problems in growth and development.

What about the brain? Isn't that where pot does most of its work?

That's about the biggest question of all.

Because no one's completely sure yet of how, exactly, marijuana works in the brain. Still, researchers think they're closer to real answers than they've ever been before.

And what they're learning is that marijuana alters the way thoughts and perceptions are processed in the brain.

And it does that in a number of ways:

- Pot ups the balance of chemicals that control mood, energy, appetite, and concentration.
- It disrupts learning and memory-making in the brain, causing forgetfulness and problems in concentrating.
- Marijuana also seems to reduce brain cell sensitivity. Some researchers think that heavy

Evidence is piling up about pot's ability to impair the immune system—which fights off infections and disease in the body.

use may eventually damage connections between nerve cells.

That much is already known. But uncovering all of pot's effects in the brain is probably years away.

But this much is known right now: Heavy users in general and long-time smokers in particular are more likely to suffer ongoing problems than occasional smokers and non-smokers.

And that should give even the most confirmed pot smoker something to stop and think about.

Does marijuana cause birth defects?

Maybe.

Because marijuana and impending motherhood don't mix very well, either.

According to the best available evidence,a pregnant woman's pot use can cause unnecessary problems for her unborn baby, even raising levels of miscarriage and stillbirth.

That's because marijuana metabolites can cross the placenta to the developing fetus, and that can result in lowered birth weight,nervous system problems, and delayed learning.

And for most mothers-to-be, risks like those are just too high to justify getting high.

GETTING OFF GETTING HIGH

For most people, getting off marijuana isn't a big deal. All they need to do is stop—and stay stopped. Quitting isn't fun, but it rarely requires much more than a little time and a lot of willpower.

For others, it's more complicated. That's because some people let pot become a main part of life, like going to the bathroom in the morning or to bed at night.

For them, quitting is just the first step in an ongoing process, one that will involve finding alternative activities to fill the holes that giving up marijuana leaves behind. Places to start:

- Exercise. Any activity will boost your spirits and clear your mind. Running and aerobics, in particular, seem to turn on the same feel-good brain chemicals that pot does—without the risks.
- Diet. A junk-food-free diet (less fat, more fresh foods and whole grains) can help tone down the blues that can come with giving up pot. Avoiding caffeine and sugary drinks can help, too.
- Relaxation. Learn to relax. Try an activity or a skill that you may have forgotten for a while.

Now is as good a time as any to experiment with who you're going to be from here on out.

If you think you need help, get it. And if you've thought about it before, do something about it now. It's the best time we've ever heard of for doing anything.

I think kids will pick up this brochure. I picked up brochures like this a few times. It's attractive—you could wear a hat with this leaf on it, you know (laughter). The picture of the marijuana leaf is cool. It might make them want to try it.

Pretty much anybody could have wrote this. All they had to do was to look up information about pot, put it all together and you have something that they think is informational. But that's only if you read it. This looks like someone was given an assignment. They went to the library. Then they put it together in this and photocopied it by the thousands.

When I read this it seemed that they didn't know the answers to the questions they asked. What they should do is try to get kids' attention in the beginning. Then have stories of people of different ages. With pictures telling the bad things that happened to them when they took drugs—stories of people who got killed or died while using drugs.

You get out of this what you want to get out of this. I mean if you're a pot smoker and you're trying to quit, sure, you can find out how to quit. You know, stuff like that. But if you don't care about quitting. You're just going to blow off this brochure and not get anything out of it.

▲ Figure 3.5 *Teenagers' responses to a brochure about the potential hazards of smoking marijuana on health. Reprinted with the permission of DIN Publications, Tempe, AZ.*

A one-page handout, *Inhalants* (see Figure 3.6), was designed to offer older students (particularly freshmen in college) advice about the effects of sniffing aerosols and solvents. It came as part of a package of six one-page handouts on drug education topics such as alcohol or cocaine. Students in our study rated it "the best" of the six. They thought the topic was interesting and wanted to know more about the effects of inhalants, particularly what happens moment by moment. This handout promoted a lot of positive discussion of the sort "it makes you really think about it."

Yet as the comments in Figure 3.6 show, some students were ambivalent about the effectiveness of the message. Students' criticisms arose mainly from the picture of the body. As one student questioned,

> I already know where my brain, heart, and lungs are. Do they think we're dumb? Can't they think of a better picture?

These students wanted content about drugs that was different from what they had seen already in brochures for younger audiences. As one college freshman student put it:

> I learned this stuff in high school. Now I want more depth about what inhalants do. You know, make me really want to read this with some new stuff.

Teenagers Construct an Image of Who May Be Speaking to Them

Although worrying over issues of writing and design are crucial, a key to composing persuasive documents may lie in anticipating readers' perceptions of who may be speaking, of the persona projected through the text. Much like document designers who may imagine their audience, readers may construct an image of the speaker as an individual or as an organization comprised of people—for example, an organizational identity or a corporate voice. Of course this image may or may not bear any resemblance to the actual author(s) of the text.[29] And it may or may not be the image that authors intend to project. Walker Gibson—one of the best prose style

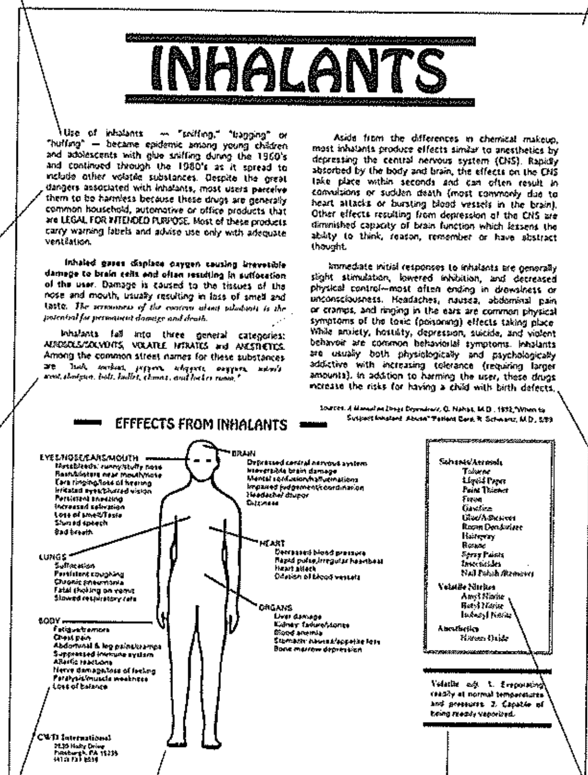
[29] Research suggests that readers may also consider the *actual* author a critical piece of information. For example, readers have been known to judge the merit of scientific articles and proposals, at least in part, by who wrote them and by who is cited in the bibliography or references. Even when articles and proposals are judged using blind peer reviews, it is still sometimes easy to figure out who the author is by making inferences about who "shows up" in the references. Experts use these clues to develop hypotheses about what the author knows, what the text might say, what point of view it might take, how novel the arguments might be, or how truthful it might be (see, for example, Bazerman, 1985; Berkenkotter & Huckin, 1995; Blakeslee, 1993; Bobbitt-Nolen, Johnson-Crowley, & Wineburg, 1994; Charney, 1993; Wineburg, 1991).

There shouldn't be so much text. Images and symbols are much stronger. The stacking of text into blocks is a good idea. But the "Inhalants" paragraph turns me off. It's obviously aimed more toward people with backgrounds like in science or math.

Here they highlight the word "perceived" but then they don't highlight the categories of inhalants. It's like inconsistent.

You know, I like the way that they have the big blocks of type that have important information other than just the facts like people die in alcohol accidents. I mean most people already know that. But I think they could say a little more. They could have more indepth info about what inhalants are, and then go down to the diagrams and stuff.

I think that sometimes the diagrams like this are kind of effective. What if they used actual photos of things that happen that go along with drugs? Like things that happen, I mean, where the drugs come from, who's in danger, you know actual footage of what happened.


INHALANTS
Use of inhalants — "sniffing," "bagging" or "huffing" — became epidemic among young children and adolescents with glue sniffing during the 1960's and continued through the 1980's as it spread to include other volatile substances. Despite the great dangers associated with inhalants, most users perceive them to be harmless because these drugs are generally common household, automotive or office products that are LEGAL FOR INTENDED PURPOSE. Most of these products carry warning labels and advise use only with adequate ventilation.
Inhaled gases displace oxygen causing irreversible damage to brain cells and often resulting in suffocation of the user. Damage is caused to the tissues of the nose and mouth, usually resulting in loss of smell and taste.
Inhalants fall into three general categories: AEROSOLS/SOLVENTS, VOLATILE NITRATES and ANESTHETICS. Among the common street names for these substances are
Aside from the differences in chemical makeup, most inhalants produce effects similar to anesthetics by depressing the central nervous system (CNS). Rapidly absorbed by the body and brain, the effects on the CNS take place within seconds and can often result in convulsions or sudden death (most commonly due to heart attacks or bursting blood vessels in the brain). Other effects resulting from depression of the CNS are diminished capacity of brain function which lessens the ability to think, reason, remember or have abstract thought.
Immediate initial responses to inhalants are generally slight stimulation, lowered inhibition, and decreased physical control—most often ending in drowsiness or unconsciousness. Headaches, nausea, abdominal pain or cramps, and ringing in the ears are common physical symptoms of the toxic (poisoning) effects taking place. While anxiety, hostility, depression, suicide, and violent behavoir are common behaviorial symptoms. Inhalants are usually both physiologically and psychologically addictive with increasing tolerance (requiring larger amounts). In addition to harming the user, these drugs increase the risks for having a child with birth defects.
EFFFECTS FROM INHALANTS
EYES/NOSE/EARS/MOUTH
BRAIN
LUNGS
HEART
BODY
ORGANS
Volatile adj. 1. Evaporating readily at normal temperatures and pressures. 2. Capable of being readily vaporized.

This looks to me like a health form, a handout you get at the nurse's office and never read. And putting these on this colored paper is like low budget. Even if you folded it like a brochure it would be more interesting than, you know, just simply giving the person a hand-out like it was torn off a bulletin board with frat announcements. It's much more interesting to have some kind of fold-out. Even in white and black.

I didn't even bother to read the long, involved paragraphs at the top of the page. I was more interested in reading the diagram and the lists. I wanted more diagrams and pictures and less text. And I mean text that went together with the visuals.

It went downhill in the diagram. I think they could have improved on the diagram and not made it such an eyesore. The way there's dots in there is kind of an eyesore. The picture is, well … it has no, it's just kind of a figure. It has no value.

They give you a definition of "volatile" way down at the bottom there and in the corner. And when it says "volatile" in the text, you have to go way down to the bottom to see what it means. And they don't define other terms at all, like "nitrates." What do I think they mean by that? I have no idea.

You know, when they're talking about volatile nitrates, they list amyl nitrate, and, I mean, why are we supposed to know what these are? Am I getting anything extra by reading this? NO!

▲ Figure 3.6 *Teenagers' responses to a flyer intended to warn them about the dangers of inhalants. Courtesy of Campuses Without Drugs, International, Inc., Pittsburgh, PA.*

analysts of the twentieth century and someone who has written extensively on persona (1966, 1969)—suggests that opening a text is like meeting a new person you've never met who wants to convince you of something. When readers meet someone or some organization as they do through a document, they may try to bring a neutral attitude to the meeting.

> But we are bombarded with impressions of such power ... that the most we can do is reserve our impressions with as much readiness for correction as possible.
>
> [W]hen someone tells us something, no matter how well we may know him, how adjusted to his appearance we may be, our understanding of *his* meaning is almost certainly more than verbal, involving a sense of the him that is talking, at the moment, in the flesh, before us. [italics in original] (Gibson, 1966, pp. 6–7)

Research tells us that readers may indeed construct an image of the person or organization talking, an image of someone trying to make an impression on them. Hatch, Hill, and Hayes (1993), for example, found that the essays high-school seniors write to gain acceptance to college are judged by university admissions counselors—at least in part—by the persona the student applicant projects. Admissions counselors in their study were asked to judge a set of 20 essays written by high-school students who wanted to enroll in a private university in the Northeast. Before the admissions counselors made their judgments, the essays were first evaluated by a group of writing teachers who agreed on which essays projected a positive or negative image of the person who wrote it. Counselors were told that all 20 essays were written by students who had been wait-listed (that is, they were at the top of the list as the next best candidates to admit). Counselors were advised that all 20 students were about equal from an academic point of view—that is, they had comparable grades, recommendations, and Scholastic Aptitude Test (SAT) scores. Their task was to admit 10 of the 20 students. The key difference in who the counselors chose to admit was the persona students projected through their writing.

Hatch and her colleagues found that the personality students projected was significantly correlated with the counselors' decisions. Counselors voted to admit students who conveyed a positive persona twice as often as those who projected a negative one. A positive persona was related to traits such as sincerity, sensitivity to other people, and eagerness to accept diverse perspectives. A negative persona was associated with insincerity, egocentrism, and insensitivity to diverse perspectives.

It is reasonable to believe that the persona projected by a document may play a powerful role in readers' acceptance of the message. Unfortunately,

document designers typically have no way of introducing themselves and the organizations they work for beyond what they can make the reader see by means of words and graphics in various arrangements.[30] The visible language of a document invites the reader to make guesses about who is speaking, to infer a personality just as they might in a social situation.

But unlike a face-to-face encounter—where conversants get multiple cues for assessing how the communication is going through gesture, intonation, facial expression, the setting, and so on—the reader of a document has only words and images to go on. As document designers introduce themselves through a document, their choices of words and graphics have an absolute importance and finality. Unlike the give-and-take of face-to-face interaction, in which conversants can repair a failing conversation, document designers have no backup resources for fixing a bad interaction with a reader. Document designers get only one chance to dramatize themselves and the organizations they work for, one chance to communicate effectively with the reader. When evaluating a document, a reader is by no means ready to reserve judgment, to wait and see. "A reader can shut the book at any moment, at the slightest displeasure" (Gibson, 1966, p. 8).

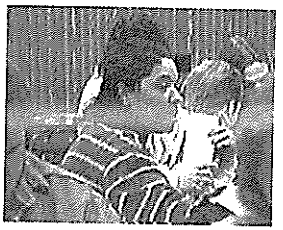
Because our research team was interested in the persuasiveness of the drug education brochures, we wanted to know not only whether the message was presented in a convincing way, but also whether students constructed an image of the persona. Moreover, if readers imagined a person or organization behind that text, could that image influence their acceptance of the message? We uncovered these perceptions in three ways. First, during the protocols and interviews, we found that students made comments about their impressions of the message and the author without being asked. Second, in the focus groups, we asked students directly whether they imagined an author as they read. Third, in the surveys, we asked students to rate the persuasiveness of the brochures and, if they imagined an author, to characterize the person or organization.[31]

[30] Persona or voice is usually engendered by a combination of visual and verbal cues which suggest tone, point of view, and rhetorical stance (the attitude of the speaker toward the listener). People commonly identify the persona or the voice with the character of the speaker. The concept we use here corresponds to what Elbow (1994) calls "resonant voice," that is, "the relation of textual features to an inferred person behind the text" (p. xxxvii). The resonant voice has no necessary relation to the real person, group, or organization who wrote it; nevertheless, that voice may influence in powerful ways how the listener, viewer, or reader imagines the author. In some cases, the persona may be projected explicitly by mentioning the name of the author, by providing biographical information about the people who worked on the document, or by profiling the organization's history or philosophy. In these cases, although the author tries to manage the reader's image of who is speaking, readers construct their own image, sometimes agreeing with the image the author intended to project but at other times dimissing it as exaggerated, self-serving, or hypocritical.

[31] Our methods may seem a bit intrusive in that we prompted readers to think about the author, something they may or may not have done ordinarily. By asking students about whether they imagined an author, we may have inadvertently influenced them to imagine one. However, in the interviews and think-aloud protocols, conditions in which we did not prompt students to address issues of persona, we found that students more than occasionally made remarks in reference to a person or a group they imagined speaking. We hypothesize that documents routinely present readers with images of organizational or corporate identity (e.g., about values, knowledge, credibility, politics, trustworthiness, attitudes toward customers, and so on). Learning how readers make judgments about an organization's identity is a difficult area to study for it requires choosing research methods that do not lead the reader. This study suggests that, indeed, there is some psychological reality to the concept of persona.

Students reported that they sometimes pictured an individual writer, but more often saw the author in terms of an institutional "they," citing health agencies or the government as author. One student put it this way:

> I think the writer is someone who is, you know, higher up ... someone who would never come to my neighborhood, but who wants to control us ... someone like very detached....
>
> They might have a purpose, but they're doing it just because they need to put out information someone told them to put down.



For the most part, students alternately referred to the author as "someone" or "they." For example, "the writer is *someone* who thinks we're dumb, so *they* talk down to you like you can't think, can't decide on your own." Or, "I hear *someone* like the drug czar talking behind this" (pointing to prose that says "Just say no, I'm too special"). In a few cases, students wondered if there was more than one author:

> Well, I'm not sure who wrote it because *maybe there was somebody who wrote the words and someone else who did the pictures*. I'm not sure if they're the same. It seems like *they* had a purpose but yet ... though, I can't point to it. I don't know. [italics added]

Students made reference to their image of the persona in various ways, sometimes with remarks indicating they felt the author really cared about teenagers, other times indicating that the author seemed distant and out of touch. Here are some of the positive and negative characterizations of the author students generated in their own words.

Positive

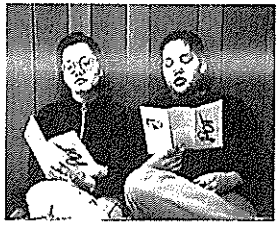
- A kind and helpful person
- Someone who cares, who knows the pain of drugs
- A religious person with a sincere mission for other people
- Someone who has seen the trouble drugs can get you into
- A policeman who doesn't have an attitude that young people are jerks
- An organization trying to give some decent advice
- A person who wants to tell it like it is
- A person with a little sense of humor and loves children
- A doctor, a person who knows what the actual health effects would be

Negative

- An earthy kind of weird white person
- Not a person, a faceless organization
- Somebody paid minimum wage who is completely shut off from the outside world with outdated books and encyclopedias to work from
- A "big nurse" type, out of touch, no kids, and never talks to teenagers
- A bureaucrat in some big office in Washington who is dealing with out-of-date information
- A Nancy Reagan "wanna-be"
- A person we wouldn't like to meet
- A white hippie who thinks he's cool, but he's not
- One who may know the facts, but nothing of real life

Teenagers Imagine How the Speaker Views Them

Students' reactions to the drug brochures revealed that the selection, organization, and visual display of the content shaped not only their interpretation of the message but also their image of the audience they believed was being invoked through the text. In other words, real readers may use textual cues, both visual and verbal, to construct an idea of the imagined or "implied reader" (Booth, 1961, p. 138). Readers rely on the words and pictures to make guesses not only about what the text may mean but also about who is speaking to whom, about who is being "hailed" or "called out to" by the text, about the social relations between the speaker and the reader (Althusser, 1971). For example, in reading a brochure that presented a cartoon character of a girl sitting on a chair with a cat curled up next to her, one seventh-grade student said, "This must be written for first or second graders. Look at that kitty cat—it's too cute for someone my age."



Impressions created through the choice of content. From the point of view of an outside observer (that is, from our research team's perspective), document designers' writing suggested that they hoped teenage readers would adopt the role of "a thoughtful person who cares about being healthy, especially about the long-term health of their internal organs." Teenagers, however—from junior high to college—seemed "unfazed" by discussions of the long-term health effects of drugs such as anabolic steroids or alcohol, rarely commenting on them. They were interested in the immediate effects of drugs on the body,

especially in physical damage they could see. The communicator's interest in getting students to ask questions about the long-term effects of drugs for themselves went largely unheeded.

Document designers also presented short narratives designed to depict "drug scenes" in which a smart teenager does the "right thing." These scenarios often went like this: boy goes to party, meets new friend, new friend offers drugs, boy "says no," and everyone lives happily ever after. Although these scenarios were designed so that the reader would imagine himself or herself in the situation of being asked "Want some alcohol or other drugs?" they were often viewed by students as "somebody else, not me" or "fake and unrealistic." Students did not take on the empathetic "that could be me" role the writers hoped for. Instead they said things like:

> I kind of hear Nancy Reagan's voice there. "Just say no," boys and girls. That's all you need to do.

Students' interpretations showed that readers may ignore (and in some cases resist) the roles that communicators may hope they will take on during their reading. For teens in this study, the "just say no" message failed miserably.

Impressions created through the visuals. Many of the brochures our research team reviewed used simple line drawings that seemed to caricature teenagers, unintentionally or not. The style of a good proportion of these drawings was reminiscent of the bad cartoons in early military manuals, in which artists depicted strange-looking sergeants with pointy noses who gestured knowingly at a blackboard while forcing a smile. Another poor drawing style presented readers with Pillsbury Doughboy-like "pillow people" with friendly but personless snowman faces.

Some students asked if artists first drew a generic person and then made it a boy or a girl, depending on what was needed.[32] Other students who knew about "clip art" asked if the people who made the brochures used it at the last minute. Students commented repeatedly on the need for realistic photographs of young people in authentic situations; students exhibited no particular bias toward four-color photography, but realism seemed essential.

Recently some organizations that design drug education literature have moved toward more representational renderings they call "real style" (for example, companies such as Channing-Bete). Unfortunately, because the real-style brochures were unavailable when we carried out this study, we did not test them to see if students liked them better. What became evident to us from the brochures we assessed was that teenage readers

[32] Teenagers may be onto a strategy practiced by the communications departments of some organizations. For example, a revision of a 1991 brochure by the Ford Motor Company (Ford U.K., Dagenham, England) changed the race of its company's employees. In the original version, which presented a view of Ford U.K.'s forward-thinking hiring policies, 18 smiling employees stood side-by-side. Of the 18 workers, 5 were from minority groups: 4 blacks and 1 Indian with a beard and turban. In a revision, all of the black employees turned white, and the Indian executive lost his beard and turban. Citing an error by its ad agency, Ford paid each retouched worker $2,300. (CNN Prime News, February 21, 1996 and *Newsweek*, March 4, 1996, p. 55).

were already seasoned consumers of graphics. They knew what they liked—they wanted visuals that showed teens who were smart, savvy, and in control.

Impressions created by attitude and tone. In the survey, we asked students if they could tell where the author thought the reader lived. Students checked suburbs (52%), rural (25%), and inner city (23%). Students tended to believe that the author viewed the reader as a teen from the suburbs who had never taken drugs and needed to "just steer clear of it" rather than "deal with it." In some cases, students from the inner city responded angrily to the idea that a brochure could make a dent on the problems people have with drugs. One African-American female said this:

> That brochure is insulting to my intelligence because if they really wanted to do something about crack, they should take the money they are wasting on these dumb brochures and on studies like yours and go find out who's bringing it [the crack] here. These are the people who you should be targeting this to. Not one person in the projects, not one poor person manufactures crack. That's the bottom line. I don't have nothing to say about that brochure, it's insulting.
>
> Tell them to take the money and go stop the government. They know where this mess is coming from and who brings it here. It's people making money on other people's problems and that's exactly what they are doing. This is a business.
>
> What about the money for treatment centers? Where are they going to get the money for taking care of all these babies that are messed up behind this mess. This brochure does not lift their spirits, does not give them a job, doesn't give them money, doesn't give them respect—none of that. That's what causes people to go to drugs, because they don't have a life worth living.

Another focus group participant, building on her comments, captured why people from the African-American community may respond indignantly to the "idea of solving drug problems through a brochure":

> I want to say this as diplomatically as possible ... and I don't want to hurt anybody's feelings, but for such a long time ... heroin, cocaine, and all the rest of that drug mix (crack has been the most notable) ... but for so many years they were in the cities and ghettos, black areas. With it tucked away in the ghettos, the rest of society just sort of covered it over, saying "well, it's not affecting me." Now

> crack is affecting the nucleus of our society, you know, the brains of our society. Now our society is becoming afraid. Don't you think those people that it's been affecting for all these years don't notice this?

Comments like this one show that readers may respond as much to the idea of a document as to the actual text. Whether a document will be a good vehicle for conversing with readers depends on the reader's situation, making it important for document designers to be sensitive to the rhetorical appropriateness of the genres they choose (see Berkenkotter & Huckin, 1995). Inner-city students in this study tended to reject the brochure as a legitimate form of discourse for building bridges between the communicator and the reader.

These results also tell document designers that readers' interpretations of content may be deeply entangled with their personal conditions and social position (with either their actual situation or the one they presume the speaker wants them to take on). We found that many teenage readers were unwilling to buy into the implicit social and rhetorical contract the document invited them to take on, refusing to accept the not-so-subtle ideology that told them "let us show you how to act."[33] Students did not accept their assigned role[34] as the imagined reader and were skeptical of the rhetorical tactics used to invoke (even inscribe) them. Moreover, students' perception of the imagined reader and the persona seemed to interact. Many students didn't like "who they were supposed to be" and didn't want to listen to someone who in their words "thought they were superior and who knew what was good for teenagers."

These data show that readers' interpretations of documents may arise dynamically on the basis of their

- Knowledge, personal experience, values, and feelings
- Ideas about what the text says, about the visual and verbal content
- Impressions of who is speaking through the words and pictures (i.e., the persona, the organizational identity, or the corporate voice)
- Beliefs about who the speaker is addressing by the choice of words and pictures (i.e., readers' impression of the speaker's intended audience)
- Perceptions of the speaker's tone and attitude toward the audience
- Feelings about "the idea" of the document as an appropriate medium for communication about the content

While it is difficult to predict the particular mix that may be brought into play for any given document, this study makes clear that readers'

[33] For an interesting discussion of the social and ideological contracts between writers and readers that may be established through texts, see Brandt (1990), McCormick (1994), and Nystrand (1986).

[34] Reflecting on their previous work on audience, Lunsford and Ede (1996) point out that although they recognized the possibility of readers rejecting the role or roles that the writer wished them to adopt, they "consistently downplayed the possibility of tension and contradiction ..." (p. 170). Long (1990) hypothesizes that readers of fiction may be more willing to play or to accept a wider variety of roles than readers of nonfiction, especially when that nonfiction is addressing issues about which the reader already has strong opinions (p. 83). The findings of this study support his hypothesis.