3. You are a consultant who has been hired to do a feasibility study of whether Haemmerle Associates should put X within 1 mile of your college campus. (X can be a parking ramp, 15-screen movie theater, pizza place, modified stock dirt track, whatever.) Investigate this idea. Construct a plan for this project. Then look at all relevant factors and provide real cost estimates. This project could take all semester. Your instructor may organize you in groups.

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6

Summarizing and Outlining

SUMMARIZING

OUTLINING

In a world awash in information, the ability to construct and present concise, short versions of long documents is not only helpful but essential. The ability to *summarize* — or *abstract*, the terms are nearly synonymous — is fundamental to technical writing. You will often summarize your own documents, but you will also need to summarize documents written by others. In addition, you must know how to outline both the material you read and the documents you intend to write. This chapter explains those skills.

SUMMARIZING

This section defines summaries and abstracts, explains the various audiences that use them, and presents the skills you need to write them.

Definitions of Summaries and Abstracts

Both summaries and abstracts are short restatements of another document (Vaughan). A *summary* restates major findings, conclusions, and support data found in a document. Summaries, which accompany many types of reports, are aimed at readers within an organization, typically executives. Many report writers put summaries first, before the body, in order to alert

the reader to the main point or gist of the report. An *abstract* is generally a short version of a journal article. Abstracts appear in two places: with the article in the periodical and as an independent unit provided by abstracting services for professionals in the field. An abstract is either indicative or informative. *Indicative abstracts* list topics in the document; *informative abstracts* present qualitative and quantitative information found in the document. An abstract usually mentions the document's purpose, scope, methodologies, results, and conclusion (ANSI).

Audiences for Summaries and Abstracts

Summaries and abstracts serve similar functions, allowing readers to

- discover the gist of the report or article without reading the entire document.
- determine whether the report or article is relevant to their needs.
- get an overview before digesting the details.

Summaries enable readers, especially managers, to review a short version of a longer document when they don't have the time or need to read the longer document. Abstracts allow readers to keep up with current developments in the field. Researchers, for instance, often search abstracting services to review literature relevant to their projects. After reading an abstract, a researcher can decide whether to read an entire article. Both summaries and abstracts provide an overview of a document, which helps readers better comprehend its contents.

Planning Summaries

In order to plan for an abstract or a summary, you need to understand basic summarizing strategies, two methods of organizing a summary or abstract, and certain details of form.

Use Basic Summarizing Strategies To summarize effectively, you must perform two separate activities.

(1) (2)
- Read to find the main terms and concepts.
- Decide how much detail to include.

In reading to find the main idea, you must look for various elements: FIND MAIN TERMS & CONCEPTS.

- What are the main divisions of the document?
- What are the key statements?

- Which sentence expresses the overall purpose of the document?
- Which sentences tell the main ideas of each paragraph?
- What details support the main ideas?
- What are the key terms? Which words are repeated or emphasized?

Consider the underlining in the article on pp. 126–127. Note how the summarizer has indicated key sentences and terms. You might find this kind of reading and annotating difficult at first, but with practice you will become more confident of your ability to find the major divisions, main points, and main support in a document. HOW MUCH DETAIL TO INCLUDE

To decide how much detail to include, always consider your audience's needs. If they need just a description of the document, you need only name the main sections. If they need just basic facts, you might present the report's purpose and main findings. If they need to grasp the underlying ideas, you must provide details. The general rule is to be as complete as your reader requires. By the end of a useful summary, a reader should understand the report's purpose; its major findings, conclusions, or recommendations; and the major facts on which the findings are based.

Choose an Organization The two main strategies for organizing a summary are

(A) (B)
- proportional reduction → example on page 127
- main point followed by support → example on page 128

(A)

Proportional reduction refers to the idea that each part in the summary should be proportionally equal to the corresponding part in the original. Suppose the original has four sections, three of which are the same length and one of which is much longer. Your summary of this piece should exhibit the same proportions: three shorter sections of about the same length and a fourth, longer section. You can make the overall summary shorter or longer, depending on how much detail you report for each section, but still maintain the same proportions. (B)

Main point followed by support means you should write a clear topic sentence that repeats the central thesis of the document. This topic sentence could be the purpose of the report or its main findings, conclusions, or recommendations. This method is generally harder to write but is often more effective for readers because you can slant the summary to meet the reader's needs (ANSI). An example of this type of summary appears on p. 128.

Use the Usual Form The usual form of summaries has the following characteristics:

- length of 250 words to 1 page (Abstracts that will be reprinted must stay brief — about 250–300 words. Summaries can be longer; a 200-page report might need 2 to 5 pages for a clear, inclusive summary.)
- verbs in the active voice and present tense
- a clear reference to the document (Abstracts always include a complete bibliographic entry. Generally writers put the title of the report either in the first sentence or in the summary's title. If you summarize an article, provide the entire bibliographic entry.)
- no terms, abbreviations, or symbols unfamiliar to the reader (Do not define terms in a summary unless definition was the main point of the document.)
- no evaluative comments such as "In findings related tangentially at best to the facts she presents. . . ." (Report the contents of the document without bias.)
- main points first (The first sentence usually gives the purpose of the report or the main findings; support follows.)

Writing Summaries

Read the following article. Then review the abstract and two types of summaries on pp. 127–128.

NEW GENERATION OF ANTI-STATIC FOAMS

Dramatic, improved protection from electrostatic generation and uncontrolled discharge is reported for a new generation of anti-static foam packaging developed by The Dow Chemical Co., Midland, Mich.

The technology involves an evenly dispersed, non-migrating anti-static additive system that, because of its method of performance in the foam, is not dependent on relative humidity. Unlike other former anti-static additives that perform by migrating to the foam's surface and attracting a moisture layer, this new additive is permanently fixed in the foam's matrix and does not rely on humidity for its effectiveness.

Due to the different manner in which this anti-static additive performs, the foams are expected to have extremely long shelf life, in addition to providing excellent performance in low-humidity environments. Also, there is very low corrosion potential since moisture is not attracted from the atmosphere, and very low contamination since there is no chemical migration. Overall, the anti-static properties are said to be very consistent due to greater uniformity and permanence of additive concentration throughout the foam.

PATENTS APPLIED FOR

According to Dow, U.S. patents relative to this new technology have been applied for, and developmental products upon which it is based are scheduled for commercial introduction in the near future. Initial trials have been with polyurethane foams, and Dow cited two primary applications for it. One is for packaging of sub-assemblies and similar electronic components, in which optimum static discharge protection is required because of common direct exposure of sensitive items to the packaging material. The other is cushion packaging for lightweight, electronic devices needing static-discharge protection.

"The additive used in this foam will also allow us to make anti-static polyurethane products with unique density and IFD (indent force deflection) combinations," said Jeff Lee, product marketing manager for Dow.

MOBILE TESTING LABS

In addition to the new anti-static foams, Dow also announced "mobile labs" for testing package performance. The labs are available free upon request to computer and electronics companies seeking to test performance of proposed pack designs. They are staffed by Dow Technical Service and Development specialists and travel to sites in the West and Northeast from their bases in Walnut Creek. Calif. and Boston, Mass. The two mobile labs, which are contained in 24-foot converted recreational vehicles, contain equipment to analyze all aspects of package dynamics. (*Packaging* May 1986: 65)

DESCRIPTIVE ABSTRACT

"New Generation of Anti-Static Foams" (*Packaging* May 1986: 65).	Bibliographic information
This article explains that Dow Chemical has anti-static foam packaging and mobile testing labs.	List of article's contents

SUMMARY USING REDUCTION TECHNIQUE

"New Generation of Anti-Static Foams" (*Packaging* May 1986: 65).	
Dow Chemical has developed a new generation of anti-static additive that will dramatically improve foam packaging by cutting down electrostatic generation and uncontrolled discharge. The additive does not migrate to the foam's surface and does not rely on humidity for effectiveness. It is permanently fixed in the foam's matrix. This additive should cause its packages to have longer shelf life, excellent performance in low-humidity situations, low corrosion potential, and low contamination. Two primary applications for the additive	Purpose Part 1 Part 2

are polyethylene foam to package electronic components and to cushion lightweight electronic devices. Dow also has developed mobile labs, 24-foot converted RVs, which are available free to companies wishing to test the performance of package designs.

Part 3

SUMMARY EMPHASIZING MAJOR IDEA

"New Generation of Anti-Static Foams" (*Packaging* May 1986: 65).

Dow Chemical has developed a new generation of anti-static adhesive that will dramatically improve foam packaging. Basically, the additive eliminates dependence on relative humidity. Instead of migrating to the surface to form a moisture layer, the additive is permanently fixed in the matrix. Because it has greater uniformity throughout the foam, it will perform well in low-humidity environments, protect from corrosion and contamination, and increase shelf life. Dow says that the additive, on which patents have been applied for, has been tested with polyurethane foams to protect electronic components and to cushion lightweight electronic devices. It should allow users to make unique density and indent force deflection combinations. Dow has also developed mobile labs wherein the user can test package designs on site, for free.

Purpose

Key concept for reader

Effects

Applications

Brief treatment of secondary topic

OUTLINING

An outline is a map of a document's main and supporting points. It is not, however, a prose piece with full sentences. It is a collection of concise phrases, organized in the same sequence as the document. This section explains the uses and types of outlines and describes methods for constructing them.

Uses of Outlines

Writers use outlines in two ways, as reading aids and as prewriting devices.

As a Reading Aid Readers use outlines to grasp the sequence of the ideas in a document and their relationship to each other. Constructing an outline is a good way to start the summarizing process. Jot down main points and subpoints until the pattern in the document emerges. Once you have the pattern, you can write the summary. Sometimes, of course, your

goal is to grasp the material yourself, not to write for someone else. Then the outline is all you need.

As a Prewriting Device Writers use outlines as discovery and planning devices. The outline helps a writer see the relationship between ideas. Like drafting, outlining progresses in stages. In the early stages, you must move, merge, expand, and eliminate ideas. Your goal is to discover basic topics, logical principle of organization, and an effective approach. Later, after you have discovered your main ideas and approach, your outline can become more rigid. Theoretically, if you have thought through all the ideas well enough, you should be able to write your document from your final outline. In practice, however, writing is a process of continuing discovery, and outlines frequently change. Many word processing programs, such as WordPerfect® and Microsoft Word®, now include outliners, features that allow you to construct an outline on screen and then expand it into a document.

Types of Outlines

There are two basic types of outlines: traditional outlines and nucleus outlines.

Traditional Outlines In traditional outlines, each phrase is on a line of its own. Numbers and letters show the sequence in which the ideas unfold and, along with indentations, show which ideas are equal and which are subordinate to others.

I.
  A.
    1.
    2.
      a.
      b.
  B.
    1.
    2.

Such outlines, which clearly indicate the relationships among ideas, are the final product of a long process of reworking a rough outline.

Nucleus Outlines The nucleus outline uses clusters to group similar ideas. You can use this type of outline, which you can draw with or without circles, as a reading aid, clustering on your paper ideas that are sepa-

rated in the original pages. You can also use it as a prewriting device to group related thoughts. Figure 6.1 shows a nucleus outline of the article "New Generation of Anti-Static Foams" (p. 131).

Planning and Writing an Outline

To plan and write an outline you must draft, just as you do for any document. The basic method is to

- brainstorm
- cluster
- evaluate

Repeat the process until you have an outline.

To brainstorm a topic is simply to jot down everything you know about it. The list will not be in any special order or contain logically grouped sequences, but that doesn't matter. The key is to get your ideas on paper. After you brainstorm, you cluster your ideas. To *cluster* means to indicate which ideas go together. You can use symbols (stars for one group of ideas, squares for another), or you can draw joined circles around similar items. After you cluster, you make a new draft that juxtaposes all the similar items. Then you *evaluate* your draft to decide whether you have enough useful ideas or need to provide more. Consider your audience's needs. If they need more, repeat the process of brainstorming and clustering until you are satisfied that you have developed a rough working outline.

SUMMARY

Summaries and abstracts are short (from one paragraph to one page) versions of longer prose pieces. Summaries can present the piece in miniature, giving as much emphasis to each section as it is accorded in the original, or they can begin with the main idea and follow with pertinent supporting details. Outlines are helpful devices both for enhancing one's reading comprehension and for prewriting. The traditional outline, with its numbered and indented lines, indicates relationships well. The nucleus outline, with its groups and lines, facilitates the development of subparts. Both outlines are constructed by means of a drafting process that employs brainstorming and clustering to discover and order ideas and concepts. Writers outline before writing in order to find the most effective way to present their ideas.

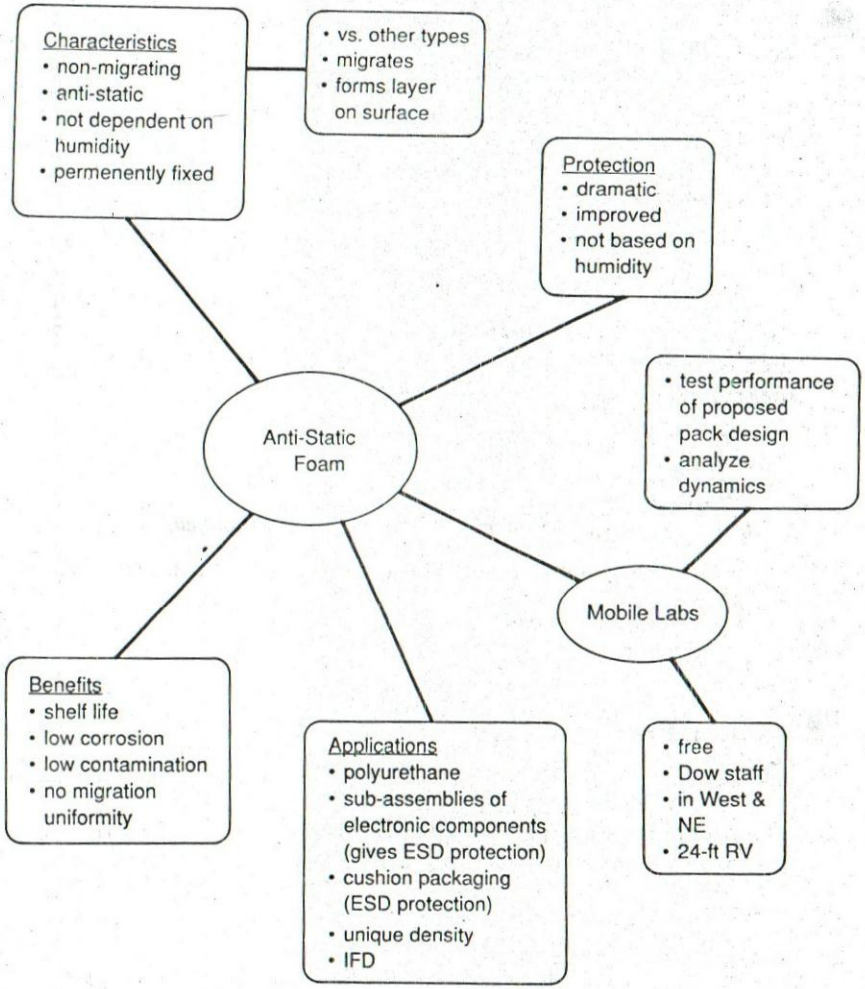

FIGURE 6.1
Nucleus Outline Based on Reading