



CHAPTER
10

Taking Effective Notes

*Learn, compare, collect
the facts!*

Ivan Petrovich Pavlov
(1849–1936), Russian
physiologist

The lectures you hear and the assignments you read are a potential gold mine. Both include valuable nuggets of knowledge. Because you spend so much of your academic life accumulating information, it's unwise to do so haphazardly. After all, anybody can take notes, just as anyone can doodle. But it's crucial for your notes to go beyond mere busywork. The key is to take notes effectively. This chapter maps out a strategy for effective note taking:

- **Starting with a System**
- **Gathering Information**
- **Pulling Things Together**

How do you build on the framework of preparing for lectures and assignments?

What is the primary purpose of note taking?

What does research tell us about the fragility of memory?

What can we learn from the Leon-Clyde story?

Although it's obviously very important to have the right mindset before reading a textbook assignment or listening to a lecture, the efforts you make to prepare and foster a good frame of mind will be wasted if you don't build on this foundation. The way to do this is by taking notes.

The primary purpose of note taking is to provide a written record of what you've read or heard. You can't depend on short-term memory to retain all the ideas in a typical lecture or textbook chapter. Forgetting can be instantaneous and complete. For example, who hasn't forgotten a name only minutes after an introduction? Or had to reread a telephone number after getting a busy signal?

Given these experiences, it would be folly to rely solely on memory for something as important as an academic course. Carefully controlled research further points out the fragility of our memories. Experiments have shown that unrehearsed information is sometimes forgotten in as little as twenty seconds.¹ In a classical experiment, Hermann Ebbinghaus found that almost half of what is learned is forgotten within an hour.² Recently, psychologists carrying out experiments similar to Ebbinghaus's affirmed his findings.

The following true story further confirms the rapidity and scope of forgetting. Three professors eating lunch in the faculty lounge had this conversation:

CLYDE: Did you hear last night's lecture?

WALTER: No, I was busy.

CLYDE: Well, you missed one of the best lectures in recent years.

LEON: I agree. The four points that he developed were gems.

CLYDE: I never heard anyone make his points so clearly.

WALTER: I don't want you to repeat the lecture, but what were those four points?

LEON: (Long silence) Clyde? (Passage of two or three minutes; seems like an hour.)

LEON: Well, I'd better get back to the office.

CLYDE: Me, too!

WALTER: Me, too!

Both Leon and Clyde were brilliant men, yet neither was able to recall even a fragment of any point made in the previous night's lecture. Each had forgotten the four points because neither had transferred the points from short-term memory to long-term memory by silently reciting them. Instead, both had recited that the speaker was clear, forceful, and wise and that he had made four points—and they remembered only what they had recited. As you can surmise

¹Douglas A. Bernstein, Edward J. Roy, Thomas K. Srull, and Christopher D. Wickens, *Psychology* (Boston: Houghton Mifflin, 1988), p. 293.

²Alan J. Parkin, *Memory: Phenomena, Experiment and Theory* (Cambridge, MA: Blackwell, 1993); Hermann Ebbinghaus, *Memory* (New York: Dover, 1964), p. 76.

What are the elements of successful note taking?

from the anecdote, the only sure way to overcome forgetting is by taking notes and then studying and reciting them.

But taking notes doesn't simply mean scribbling down or marking up the things that strike your fancy. It means starting with some sort of system and then gathering information quickly and efficiently before pulling things together.



Starting with a System

What can you do to make your notes more meaningful?

Too many students rely on a seat-of-the-pants method of taking notes. Whether you're taking notes for a lecture or for a reading assignment, it pays to have a system in place. If you're taking notes in a lecture or separate notes for a textbook assignment, the Cornell System is your best bet. If you're actually marking up your textbook pages, it's unwise to star, underline, and highlight in a haphazard fashion. You need to follow some consistent guidelines to ensure that your markings are meaningful.

Using the Cornell System

In what sense are notes more valuable than a textbook?

The notes you jot down can become a handwritten textbook. In fact, in many instances they are more practical, meaningful, and up-to-date than a textbook. If you keep your notes neat, complete, and well organized, they will serve you splendidly.

What is the Cornell System?

The best way to ensure that the notes you take will be useful is by adopting the Cornell System, which was developed at Cornell University almost fifty years ago. Over the years, the Cornell System has been embraced by countless colleges and universities in the United States and throughout the world. Although the system is far-reaching, its secret is simple: Wide margins on the outside and the bottom of each page are the key.

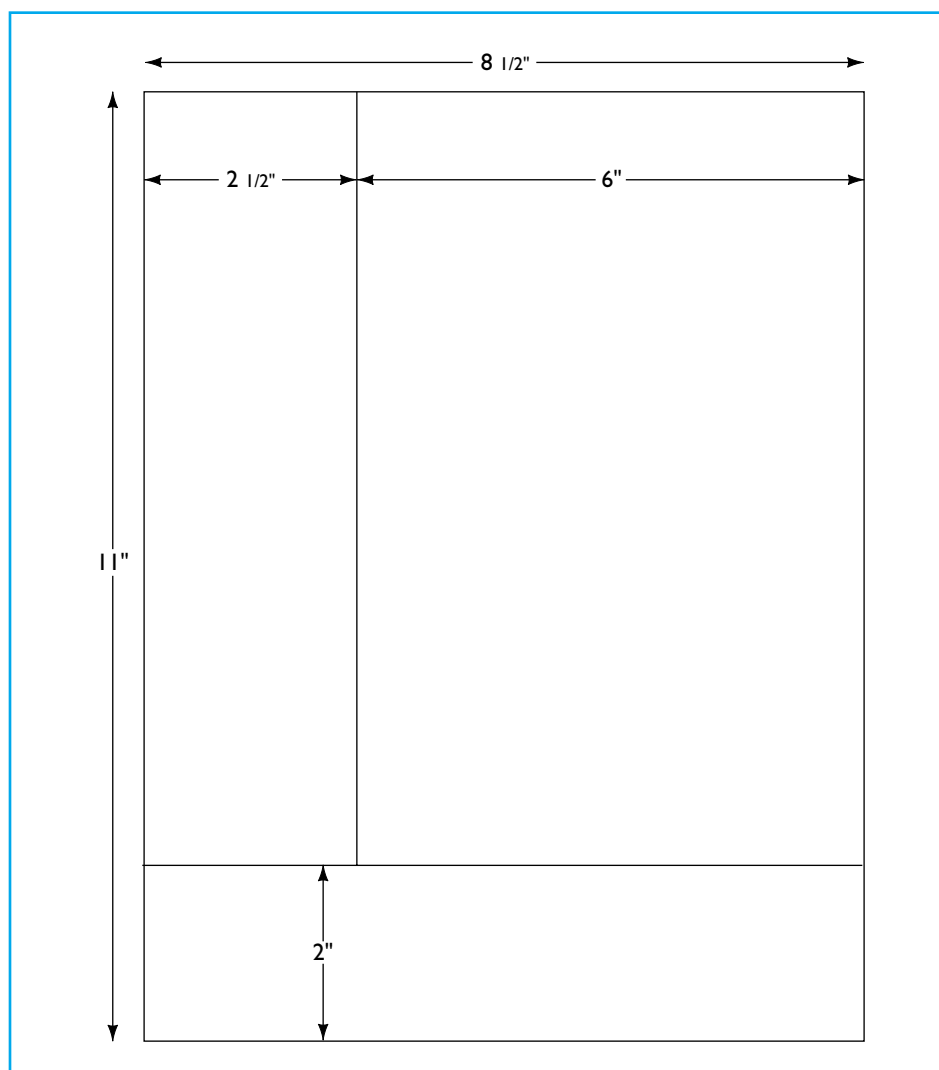
What are the principal components of Cornell-style note paper?

Many office and school supply stores now sell Cornell-style note paper, but you can easily use a pen and ruler to adapt standard loose-leaf paper to the task. First draw a vertical line down the left side of each page two-and-one-half inches from the edge of the paper; end the line two inches from the bottom of the sheet. This creates the *cue column*. Next draw a horizontal line two inches up from the bottom of the page. This is the border for your *summary area*. The large space to the right of the cue column and above the summary area is where you write your notes. Figure 10.1 shows a Cornell note sheet.

What are the cue column and summary area used for?

As you're taking notes, the cue column should remain empty, as should the summary area. But when the time comes to review and recite what you've jotted down, you'll use the cue column for questions to help clarify meanings,

Figure 10.1
The Cornell Note Sheet



How does the Cornell System adjust to the demands of different courses?

reveal relationships, establish continuity, and strengthen memory. The summary area will be used to distill a page's worth of notes down to a sentence or two.

The information that goes in the largest space on the page varies from class to class and from student to student. Different courses come with different demands. The format you choose for taking your notes and the ideas you jot down are almost entirely up to you. If you have a special way of jotting down your notes, you should be able to use it with the Cornell note sheet.

Why is the outline format discouraged?

About the only format you should be wary of is the outline. As crisp and neat as they may look at a glance, outlines have a way of tying your hands and forcing you to squeeze information into an unforgiving framework. When you're taking notes—especially in a lecture—the last thing you want to be worrying about is Roman numerals.

What was Professor Fox's objection to outlines?

Edward W. Fox, Cornell University's great teacher, lecturer, and historian, was skeptical about the value of outlines and other rigid setups in note taking:

Elaborate arrangements tend to confuse, and the traditional topical form, the use of Roman numerals, capital letters, Arabic numerals, and small letters, etc., with much indentation, has a fatal tendency to imply a logical analysis rather than elicit one.³

What should be your primary focus in all note-taking formats?

In short, you should be concentrating on the information itself, not on its numbering scheme. Here are a few formats that should work well with either lectures or textbook readings.

How do sentences in your notes differ from traditional sentences?

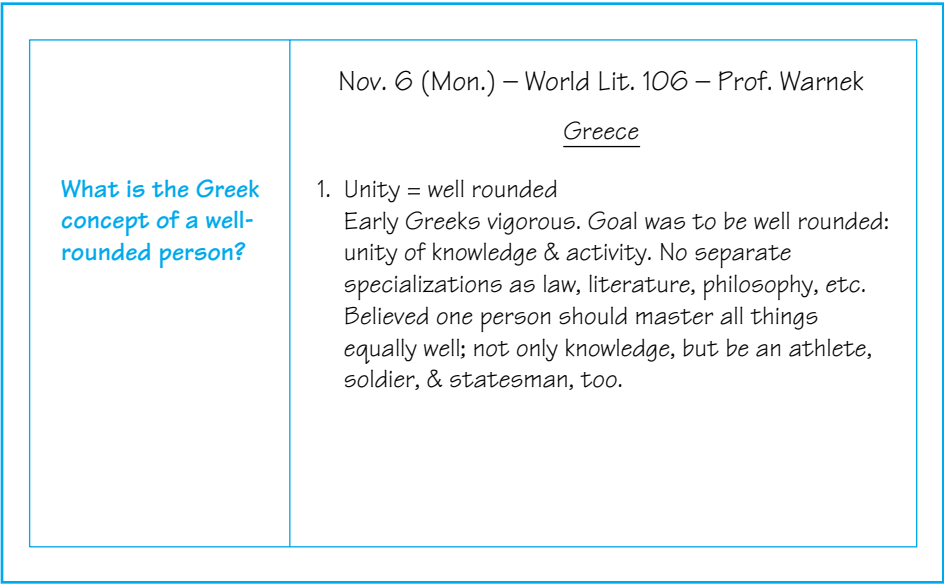
Sentences. Take key ideas from a lecture or reading and jot them down in your own words. If you're taking notes in a lecture, you probably won't have time to write out complete sentences. Instead, write telegraphically, leaving out articles such as *a*, *an*, and *the*, and abbreviating words you use often. Figure 10.2 provides an example.

Figure 10.2
Sentence Notes

	Oct. 10 (Mon.) – Soc. 102 – Prof. Oxford
What's animism?	A. Animism
	1. Object has supernatural power
	2. Power called mana (not limited to objects)
Describe mana!	a. Objects accumulate mana
	Ex. Good canoe – more mana than poor one.
	b. Objects can lose mana
How to gain mana?	c. People collect objects w/lots of mana
	d. Good person's objects collect mana
	e. People, animals, plants have mana, too.
	Ex. Expert canoe builder has mana –
	imparts mana to canoe
Who has mana?	f. Chief has lots of mana – dangerous to
	get too close to chief – mana around head.

³Edward W. Fox, *Syllabus for History* (Ithaca, NY: Cornell University Press, 1959). Reprinted by permission of the author.

Figure 10.3
Paragraph Notes



How do note-taking paragraphs compare to traditional paragraphs?

Paragraphs. Cluster related sentences in a block of text, often under a heading or label that serves to tie them together. As you see in Figure 10.3, these are not traditional paragraphs where one complete sentence flows smoothly to the next. Your sentences in paragraph-style notes will usually be telegraphic, and smooth transitions are not important. However, these paragraphs share one important thing with traditional paragraphs: All the sentences should relate to the same main idea.

What do definition-style notes look like?

Definitions. Write a name or term, add a dash or colon, and then provide a succinct explanation or elaboration. Figure 10.4 provides an example.

How do you make items stand out in list-style notes?

Lists. Start with a topic, name, term, or process, and then list phrases or telegraphic sentences that relate. Avoid numbering the items unless the numbers are relevant to the list. If you want to make the items stand out in your notes, consider beginning each with a bullet point. Figure 10.5 shows what these lists are apt to look like.

What is the advantage of using drawings in your notes?

Drawings. Drawings and diagrams can succinctly sum up information that may be difficult to explain in words alone. A sketch can often convey locations or relationships more effectively than a sentence or two. Figure 10.6 shows the sort of diagram that a biology student might include in her notes.

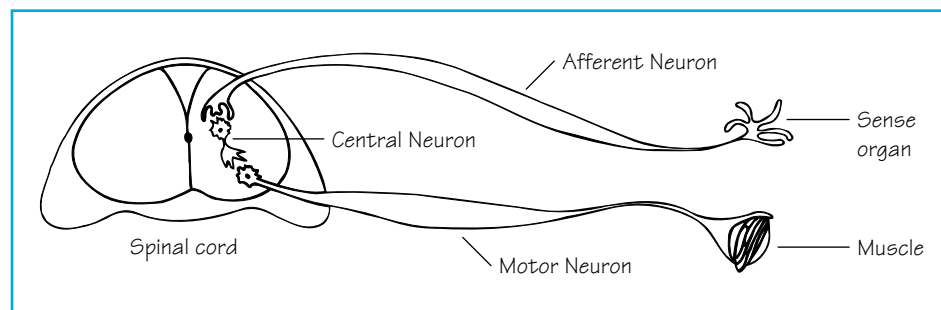
Figure 10.4
Definition Notes

Mar. 14 (Fri.) – Ed. 103 – Prof. Pauk	
What are main types of note-taking formats?	<u>Types of note-taking formats</u>
	<u>sentence</u> - Notes written in sentences, but telegraphically: w/ abbrevs. for common wds. Articles (“a”, “an”, etc.) left out.
	<u>paragraph</u> - Like real paragraphs, clustered around main idea, but sentences telegraphic & transitions left off
	<u>definition</u> - name or term, followed by dash or colon and explanation
	<u>list</u> - word or phrase heading, followed by series of items. No numbers unless relevant. Use bullet pts. instead.
	<u>combination</u> - mix of other formats

Figure 10.5
List Notes

Mar. 14 (Fri.) – Ed. 103 – Prof. Pauk	
How do texts show intonation?	Intonation in textbooks
	* boldface signals heading, subhead. May also indicate key word, phrase
	* italics place emphasis
	* underline like boldface or italics. Depends on format of book
	* bullets (circles, dots, squares, etc.) set off items in lists

Figure 10.6
Diagramming as a Study Aid



When will you need a combination of formats for your notes?

Combination. Some chapters and a few lectures may fit into a single note-taking format, but it's unlikely that most will. Good note takers must remain flexible, shifting quickly from one format to another to capture key information as efficiently and meaningfully as possible. It's important to choose the right tool for the job. Figure 10.7 shows notes that combine several formats.

What is your other option when taking textbook notes?

Marking Your Textbook

Although the Cornell System can work as well with readings as it does with lectures, when you're taking notes for a textbook assignment, you also have the option of putting those notes directly on the pages of your book instead of jotting them down on Cornell note paper.

What happens to the key Cornell components when you choose to mark your text instead of taking separate notes?

When you choose to take notes directly in your textbook, the outside margin of the textbook page becomes the substitute for the cue column, and the spaces at the bottom and top of each page serve the same purpose as the summary area in your Cornell note paper. The big difference, of course, between a Cornell note sheet and a textbook page is the large note-taking area itself. Because a textbook page is already filled with text, you obviously can't put traditional notes where the text already is. What may at first seem like a disadvantage can actually be a great boon. Rather than jotting down your notes from scratch, you can mark the words or phrases in your textbook that make up the most important ideas.

Figure 10.8 contains twelve suggestions for marking textbooks. Notice especially the use of single and double underlines; the use of asterisks, circling, and boxing for important items; and the use of the top and bottom margins for long notations or summaries. If some of these ideas appeal to you, work them into your marking system. Be sure to use them consistently so that you will instantly remember what they mean.

What is the risk of marking up your textbook?

Textbook marking can be a useful aid to study and review, but it must be done sparingly and with some self-discipline. If you overmark your book, you

Figure 10.7
Notes That Use a Combination
of Formats

<p>How do org. patterns help make books, lectures easier to follow?</p> <p>What are movement patterns?</p> <p>Examples?</p>	<p>Mar. 14 (Fri.) – Ed. 103 – Prof. Pauk</p> <p>Organizational patterns</p> <p>Where is this going? Org. patterns provide guidance in lectures & texts. Tell you where author, speaker is headed. Learning common patterns can make it easier to follow both. Also, <u>signposts</u> (next, finally, thus) can provide clues about path.</p> <p><u>Movement patterns</u> systematically travel through time, space, process. Can be easiest pattern to follow. Several types:</p> <ul style="list-style-type: none">* time or chronological pattern - events presented in order.* place or spatial pattern - info presented based on location or arrangement. Ex: descrip. of geog. features of U.S., outline of company setup* process pattern - steps or events lead to desired situation or product. Ex: recipe.
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will defeat your purpose: quick identification of important points. When the time comes to master your notes, instead of reviewing ideas you may find yourself trying to decipher a code. Also, bear in mind that the “you” who reviews the marked book will not be quite the same “you” who did the marking. As the term progresses, your knowledge will grow. By the end of the term, you will be accepting as commonplace many things that seemed so important to underscore, box, circle, star, question, comment on, or disagree with at the beginning of the term. Your early marks may hamper your review. So use the help that marking can give you, but don’t go overboard. Think ahead.

What advantage does textbook marking have over separate notes?

If you can manage to keep your marking under control, you’ll wind up with a valuable study tool. One advantage of marking up your textbook directly is that your notes and your textbook travel together as a unit. Whenever you need clarification for a sentence or phrase you have marked, you have an

Figure 10.8
A System for Marking Your
Textbooks

EXPLANATION AND DESCRIPTION	SYMBOLS, MARKINGS, AND NOTATIONS
1. Use double lines under words or phrases to signify main ideas.	<u>Radiation can produce mutations. . .</u>
2. Use single lines under words or phrases to signify supporting material.	<u>comes from cosmic rays. . .</u>
3. Mark small circled numbers near the initial word of an underlined group of words to indicate a series of arguments, facts, ideas—either main or supporting.	Conditions change. . . ① rocks rise. . . ② some sink. . . ③ the sea dashes. . . ④ strong winds. . .
4. Rather than underlining a group of three or more important lines, use a vertical bracket in the margin.	had known. . . who gave. . . the time. . . of time. . .
5. Use one asterisk in the margin to indicate ideas of special importance, and two for ideas of unusual importance. Reserve three asterisks for principles and high-level generalizations.	* When a nuclear blast is. . . ** People quite close to the. . . ***The main cause of mutations. . .
6. Circle keywords and key terms.	The genes are the. . .
7. Box words of enumeration and transition.	fourth, the lack of supplies. . . furthermore, the shortage. . .
8. Place a question mark in the margin, opposite lines you do not understand, as a reminder to ask the instructor for clarification.	The latest. . . cold period. . . about 1,000,000. . . Even today. . .
9. If you disagree with a statement, indicate that in the margin.	Life became. . . on land only. . . 340 million years. . .
10. Use the top and bottom margins of a page to record ideas of your own that are prompted by what you read.	Disagree ? Why not use carbon dating? Check on reference of fossils found in Tennessee stone quarry.
11. On sheets of paper that are smaller than the pages of the book, write longer thoughts or summaries; then insert them between the pages.	Fossils Plants = 500,000,000 years old Insects = 260,000,000 " " Bees = 100,000,000 " " True Fish = 330,000,000 " " Amphibians = 300,000,000 " " Reptiles = 300,000,000 " " Birds = 150,000,000 " "
12. Even though you have underlined the important ideas and supporting materials, still jot brief cues in the side margins.	Adapt – fossil – layer –

What is a potential disadvantage of textbook marking?

How can you make sure you understand what you've marked?

entire book's worth of supporting material, including a table of contents, an index, and often a glossary, at your fingertips.

Of course, a potential disadvantage of textbook marking is that it doesn't require your complete concentration. When you read a paragraph in your textbook and write down a summarizing sentence on a separate Cornell note sheet, you have already initiated the process of taking the textbook information and making it your own. Contrast this to textbook marking, where it's possible to thoroughly annotate your textbook without truly understanding what you've marked. Drawing lines and boxes and inserting symbols and question marks can give you a false sense of accomplishment if you're not thinking deeply about what you read.

Luckily, there is a simple but powerful way to solve this problem: recitation. Rather than marking each paragraph as you go, read it through completely and then recite its main idea in your own words. Then and only then should you return to the paragraph and mark the words or phrases that express or support the answer you've just recited. This step will move you out of the realm of simple recognition and into recall. Recalling your notes is the way to help make information your own.

On the following pages are examples of appropriately marked textbook pages. Figure 10.9 shows how to organize a page using enumeration, that is, encircling words such as *first* and *second*. Write in numbers to identify salient points. The underlinings should be sparse and form the answers to the questions in the margins. This type of organization not only aids in comprehending and remembering the main points of the page, but also helps immensely when you're studying for an examination and time is short.



Gathering Information

What can you do to be fully engaged as you take notes?

Whether you are taking notes on sheets of paper or making marks in your textbook, you need to be fully engaged. To avoid drifting into the sort of robotic routine that adds little to learning, it is important to remain inquisitive as you take your notes, to keep alert for signs that will tip you off to the meaning of what you're reading or learning, to record things efficiently, and, as always, to stay flexible for the inevitable exceptions and special cases.

Being Inquisitive

What is the secret to being an active participant?

You can't really expect to do a good job of gleaning the most important information from a lecture or reading unless you are paying attention. And while getting enough sleep and sitting up straight can help promote alertness, the real

Figure 10.9
Use of Enumeration in
Textbooks

Source: John P. McKay, Bennett D. Hill, and John Buckler, *A History of World Societies*. Copyright © 2000 by Houghton Mifflin Company, Boston. Reprinted by permission.

Ming period

Naval expeditions

When? Who?

Naval history

Relative power?

Portugal power when?

Purpose of expeditions?

Tribute system??

2 motives?

Contender – who?

Admiral?

1st expedition

Ship's size?

Sea route?

3 consequences?

MARITIME EXPANSION

Another dramatic development of the Ming period was the series of naval expeditions sent out between 1405 and 1433 under Hong Wu's son Yong Lu and Yong Lu's successor. China had a strong maritime history stretching back to the eleventh century, and these early fifteenth-century voyages were a continuation of that tradition. The Ming expeditions established China as the greatest maritime power in the world—considerably ahead of Portugal, whose major seafaring reconnaissances began a half-century later.

In contrast to Hong Wu, Yong Lu broadened diplomatic and commercial contacts within the tribute system. Yong Lu had two basic motives for launching overseas voyages. First, he sent them in search of Jian Wen, a serious contender for the throne whom he had defeated but who, rumor claimed, had escaped to Southeast Asia. Second, he launched the expeditions to explore, to expand trade, and to provide the imperial court with luxury objects. Led by the Muslim eunuch admiral Zheng He and navigating by compass, seven fleets sailed to East and South Asia. The first expedition (which carried 27,800 men) involved 62 major ships, the largest of which was 440 feet in length and 180 feet in the beam and had 9 masts. The expeditions crossed the Indian Ocean to Ceylon, the Persian Gulf, and the east coast of Africa.

These voyages had important consequences. They extended the prestige of the Ming Dynasty throughout Asia. Trade, in the form of tribute from as far as the west coast of southern India, greatly increased. Diplomatic contacts with the distant Middle East led to the arrival in Nanjing of embassies from Egypt. The maritime expeditions also led to the publication of geographical works.

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secret to being an active participant is to maintain an inquisitive mindset. Formulating questions, whether silently or aloud, will unlock the meaning of information in a way that listening or reading passively just can't approach.

Use Questions to Unlock Meaning

Why are questions so important? The story of Eddie Rickenbacker provides a dramatic illustration of their effect on understanding. Rickenbacker was a highly decorated World War I flying ace who went on to become chairman of Eastern Airlines. Brought up in humble circumstances, he was forced to leave school at the age of twelve so he could find work and support his widowed mother.

Although Eddie couldn't attend school regularly, he still appreciated the value of an education and later decided to take a correspondence course in mechanical engineering. Here's part of his story:

The first lesson, I do not mind admitting, nearly finished my correspondence-school education before it began. It was tough. . . . As there was no teacher of whom I could ask a question, I had to work out the answers myself. Once I reached the answer through my own individual reasoning, my understanding was permanent and unforgettable.⁴

Perhaps you can picture young Eddie Rickenbacker with paper and book spread out on a kitchen table, struggling to gain meaning from a paragraph. Doubts began to mount. Plain grit wasn't enough. He felt overwhelmed. Then, in desperation, he probably said to himself, "All right, Eddie, try it once more: What's this fellow trying to tell me?"

Right then, he created a miniature miracle. How? He asked a question! Armed with this questioning technique, he became his own teacher. Previously, his eyes touched the words on the page and, in touching, expected that meaning would somehow, like a jack-in-the-box, pop up. Unfortunately, it didn't (and it doesn't). But with a question ringing in his ears, Rickenbacker was able to focus on hearing an answer. He heard it and understood it. You can too.

We shouldn't be surprised that questions are packed with so much power. Human beings have known this for more than twenty-four hundred years. Socrates (469–399 B.C.), the greatest of the Greek philosophers, developed what is known as the Socratic method, *the questioning method*. By employing a series of carefully directed questions, Socrates would lead another person, through his own step-by-step answers, to arrive at the understanding or conclusion himself.

⁴Edward V. Rickenbacker, *Rickenbacker* (Englewood Cliffs, NJ: Prentice-Hall, 1967), pp. 31–32.

How does Eddie Rickenbacker's story illustrate the effect of questions on understanding?

Why did questions provide such a breakthrough in Rickenbacker's learning?

How did Socrates use questions?

Why are questions so powerful?

What is it that makes a question so powerful? Maybe, as the psychologists say, questions promote concentration. If true, what a sure and easy way to gain concentration with a technique that is available to all of us!

What are the roles of the speaker and listener in a lecture?**Ask Questions Both Silently and Out Loud During a Lecture**

Although the communication may seem one-sided, both the speaker and the listener play important roles in a classroom lecture. The speaker's responsibility is to make points clearly. The listener's responsibility is to understand what the speaker says. If a speaker's message is not clear and the listener asks a clarifying question, both the speaker and the listener benefit. The speaker is encouraged and gratified to know that the audience is interested. The listener can concentrate on what the speaker has to say and feel good about raising a question that other, more timid members of the audience might have been hesitant to ask.

What did the University of Virginia survey reveal about questions?

As vital as questions can be to comprehension, they often go unasked. A professor at the University of Virginia who conducted a survey found that 94 percent of her students had failed to understand something in at least one class lecture during the semester. Seventy percent of the students had not asked clarifying questions even though they knew they could. When she asked them why they had remained silent, they answered with such statements as "I was afraid I'd look stupid," "I didn't want to make myself conspicuous," "I was too proud to ask," and "I was too confused to know what question to ask."

How do you overcome the fear of asking questions?

The way to dispel the fear of asking is to remember that the only dumb question is the one that is never asked. The way to dispel confusion is to acknowledge it by saying, "I'm confused about the last point you made" or "I'm confused about how the example pertains to your main point." In this situation, as in most, honesty is the best policy.

How do you ask questions when you're reading a book that can't talk back?**Formulate Questions as You Read**

It's easy to see how questions can help clarify important points in a classroom lecture. After all, you usually have an expert right there who can sense your confusion and respond to the questions. Not so with a textbook assignment, where all you have are silent words on a printed page. Instead of approaching a textbook as a passive recipient of its information, build on the relationship you formed with the author or authors when you first surveyed the book and read over its prefatory material by constantly formulating questions as you read, by wondering out loud about issues or aspects that concern you, and by writing out questions that help you pinpoint and remember the most important information. The latter really serves as the foundation for taking notes and mastering them.

What's a good way to start asking questions as you read?

If asking questions as you read doesn't seem to come naturally at first, a good way to start is by reading the headings and subheadings in your assignment and turning them into questions. This is an important ice-breaker in a number

of textbook reading systems, including the well-known SQ3R system (see Figure 10.10).

It doesn't take much to transform a typical textbook heading or subheading into an attention-getting question. For example, the main heading "Basic Aspects of Memory" could be turned into the question "What are the basic aspects of memory?" The technique is simple, but it works. Here are some additional examples.

Subtopic Heading	Question Formulated
The Memory Trace	What is a memory trace?
Rate of Forgetting	How fast do we forget?
Organization of Recall	How is recall organized?
Decay Theory	What is the decay theory?

What do you do once you've turned a heading into a question?

Once you have turned a heading into a question, you read the material under the heading to answer your question. Suddenly you are reading with a purpose instead of just passively taking in information. If the question is answered early in the discussion, ask another, based on what you have read.

Following the Signs

What signs help improve comprehension of lectures or readings?

Whether information is delivered in the form of a lecture or a textbook chapter, there are usually signs that help direct you down the road to comprehension. Both the intonation of the words and the way they are organized provide clues about the author or speaker's purpose and approach.

Pay Attention to Intonation

How does intonation affect the meaning of words?

Consider the dramatic effect that intonation can have on the meaning of even a simple phrase, such as "Excuse me." Depending on the tone of voice, these two words can sound polite, tentative, argumentative, or downright resentful. In each case, the words are identical, but the delivery is different. If you pay attention only to the words when you're listening to a lecture or reading a textbook, but ignore their delivery, you may be missing a critical component of their meaning.

What are the three components of intonation?

Intonation in Lectures Most college lecturers speak about 120 words per minute, which means that in a fifty-minute lecture you hear roughly 6,000 words. Listening for signals in a lecture is especially helpful because, unlike in reading, you don't have the luxury of retracing your steps if you discover that you're lost. In addition to words, intonation—variations in the lecturer's voice—is the most significant signal in spoken language. Intonation has three components: volume, pauses, and cadence.

Figure 10.10
The SQ3R System

Source: Adaptation of "Steps in the SQ3R Method" (pp. 32–33) from *Effective Study*, 4th Edition, by Francis P. Robinson. Copyright 1941, 1946 by Harper & Row Publishers Inc. Copyright © 1961, 1970 by Francis P. Robinson. Reprinted by permission of the publisher.

THE SQ3R SYSTEM**S SURVEY**

Glance through all the headings in the chapter, and read the final summary paragraph (if the chapter has one). This survey should not take more than a minute, and it will show you the three to six core ideas on which the discussion will be based. This orientation will help you organize the ideas as you read them later.

Q QUESTION

Now begin to work. Turn the first heading into a question. This will arouse your curiosity and thereby increase comprehension. It will bring to mind information you already know, thus helping you understand that section more quickly. The question also will make important points stand out from explanatory details. You can turn a heading into a question as you read the heading, but it demands conscious effort on your part.

R₁ READ

Read the paragraph or section to answer the question. Read actively.

R₂ RECITE

After you finish reading the paragraph or section, stop, look away from the book, and try to recite the answer to your formed question. If you cannot recite the answer correctly or fully, reread the section and try again.

R₃ REVIEW

When you have finished reading and reciting page after page, go back to the beginning of the chapter, glance at the headings and subheadings, and think briefly about the answers that you have already recited. Work your way in this manner to the end of the chapter. Now you should have ended with an integrated bird's-eye view of the entire chapter.

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Volume. In general, the introduction of a crucial idea is preceded by a change in volume; the speaker raises or lowers his or her voice.

Pauses. Pausing before and after main ideas sets these ideas apart from the rest of the lecture. Pauses achieve a dramatic effect and, on a practical level, provide note takers with extra writing time.

Cadence. The rhythm of a lecturer's speaking patterns can be particularly helpful. Often, like the bulleted lists you find in textbooks, the speaker lists a series of important ideas by using a steady speaking rhythm, sometimes even beginning each idea with the same words or phrase. Whenever you detect these oral signals, your pencil should be moving steadily, adding these important points to your notes.

What does reading with intonation involve?

How does reading expressively help?

How do you develop the habit of reading with intonation?

How do type styles mimic the volume, pauses, and cadence of speech?

Intonation in Textbooks Reading with intonation can make the words on your textbook page come alive. This doesn't mean reading out loud, but it does mean reading with expression. Intonation helps you combine individual words into meaningful mental "bites."

As your eyes move rapidly across the page, let your mind swing along each line with an intonational rhythm that can be heard by your "inner ear." Read the line expressively. In doing so, you will be supplying the important rhythm, stress, emphasis, and pauses that were taken out when the words were turned into written form. This will put the meaning of the words more quickly within your grasp.

To make silent intonation a regular habit, take a few minutes to read aloud in the privacy of your room. This will establish your own speech patterns in your mind so you will "hear" them more readily when you read silently.

Adding your own intonation in this way can help impart meaning and expression to words that may otherwise seem to lack pizzaz. In addition, books provide another form of intonation that mimics the volume, pauses, and cadence of speech.

Open any textbook and you'll quickly discover that the words aren't all printed in the same size or the same style. The format may differ from text to text, but in general each book takes advantage of a variety of type sizes and styles to convey information. By noting these typographical differences, you can pick up on signals for organization and emphasis.

Boldface (thick, dark type) often signals a textbook heading or subheading. It may also be used to draw your attention to a specific principle, definition, or keyword within the text.

Italics (type that slopes to the right) places emphasis on a word or a phrase.

Underlining often performs the same functions as boldface and italics, depending on the format of the particular textbook.

- Bullets (small markers, often circular or square) set off the items in lists.

How can you learn the meaning of a book's typographical intonation?

What role do organizational patterns play in lectures and textbooks?

What are movement patterns?

How are importance patterns organized?

Size, color, and placement of type often call attention to headings and subheadings. Take note of words printed in larger type, in color, or on lines by themselves.

You can usually crack a book's particular typographical code by skimming through it before you start reading. In addition, look for an explanation of format—especially if it is unconventional—in the book's introductory material.

Recognize Organizational Patterns

Where are we going? And how are we going to get there? Those are both reasonable questions to ask when you're heading off on a journey. They're equally reasonable when you're reading an assignment or listening to a lecture. Luckily, both authors and speakers normally tell you where you're headed and how you're going to get there by using common organizational patterns to help arrange their information. Familiarize yourself with these patterns, and you should find things easier to follow. In addition, you can often navigate through information by noticing certain verbal signposts that commonly line the route. Simple words such as *next*, *thus*, or *finally* can provide valuable clues to the path that a chapter or lecture is taking.

Movement Patterns Authors or speakers will frequently move you systematically through time, through space, or through a process. Once you catch on, these patterns can be among the easiest to follow.

With the **time or chronological pattern**, events are presented in the order in which they occurred. This pattern can be recognized quickly from the author's or lecturer's use of dates and such phrases as *in previous years*, *the next day*, and *two years later*, which denote the passage of time.

Items in a **place or spatial pattern** are presented or discussed on the basis of their locations or their arrangement relative to one another. For example, an author might use a spatial pattern to describe the geographical features of the United States from the West Coast to the East Coast. This is often called a *geographical pattern*. It is also called a *topical pattern* when it is used to describe the organization of a corporation along the lines of purchasing, manufacturing, sales, and so forth. The progression from item to item is usually orderly and easy to follow: from left to right, from high to low, from north to south, and so on.

Steps or events in a **process pattern** are presented in an orderly sequence that leads to a desired situation or product. A recipe and the instructions for assembling a bicycle are examples of process patterns. They often include words such as *first*, *after this*, *then*, *next*, and *finally*. You'll often encounter this pattern in computer courses and the sciences, where the steps in a process are described in the order in which they must occur to put something together, run an application, or blend ingredients.

Importance Patterns A common way of organizing facts or information is by arranging them in terms of their relative importance.

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In the **increasing importance pattern**, the most important or most dramatic item in a series is placed at the end. Each succeeding item is more important than the previous one, so a crescendo effect is created. Thus, this pattern is also called the *climactic-order pattern*.

In the **decreasing importance pattern**, the most important or most dramatic item in a series is placed at the very beginning. Such an organization grabs your interest immediately, so there is a good chance that you will stay with the writer or speaker all the way through. This pattern is commonly used in newspaper articles and is known by journalists as the *inverted pyramid pattern*.

What do causal patterns all share in common?

Causal Patterns One thing leads to another in a number of patterns, most of which are variations on the well-known idea of cause and effect.

In the **problem–effect–solution pattern**, the writer or speaker outlines a problem (cause), explains its effect, and then often (though not always) maps out a solution.

The **problem–cause–solution pattern** inverts this approach. A predicament (effect) is introduced, followed by its antecedents (cause) and eventually by remedies. In short, the effect comes first this time, followed by the cause.

Of course, not all cause–effect patterns involve problems. In technical subjects, the generic **cause–effect pattern** is quite common. In this case, variables are defined and their result (effect) is explained. Meanwhile, in the social sciences, you’ll often run into the **action–impact pattern**, where some sort of initiative is outlined, such as increased funding for education, followed by a result, such as a higher average income for employees who received a college education.

Regardless of the variation, phrases such as *as a result* or *consequently* will usually alert you to a causal pattern.

When do writers and speakers use comparison patterns?

Comparison Patterns Writers and speakers compare things, events, or people when they emphasize similarities, and contrast them when they emphasize differences. Individual characteristics may be compared or contrasted one at a time, or several characteristics may be discussed as a group. In either case, the pattern can be recognized from the various similarities or differences and from the use of words such as *similarly*, *likewise*, *conversely*, and *on the other hand*.

What do logical patterns have in common?

Logical Patterns In these patterns, a conclusion is either drawn or stated at the outset and then supported.

With the **inductive pattern**, a number of incidents are cited, then a conclusion is arrived at. The main point will be something like this: “So, on the basis of all these facts, we come to this overriding principle, which is so-and-so.”

With the **deductive pattern**, the reverse is true. Here, the principle or general statement is given first, then the events or proofs are enumerated.

Table 10.1
Signposts

Categories and Examples	When you come across these words, immediately think . . .
Example Words specifically to illustrate for example for instance that is	"Here comes an example. Must be double-checking to make sure I understood the point just made."
Cause-and-Effect Words consequently therefore as a result if . . . then accordingly thus, so hence	"There's an effect word. Better check back when I have a chance to make sure I can find the cause now that I know what the effect is."
Enumeration Words the four steps . . . first, second, third next, finally	"That's a lot of steps. I'd better be sure I'm keeping track of all of them and getting them in the right order."
Addition Words furthermore as well as along with in addition moreover also not only . . . but also	"Seems there's always something else to be added. Must be worth remembering."
Contrast Words on the other hand in contrast conversely although however, despite whereas	"Here comes the other side of the coin. Let's see how it differs from what's been said already."
Comparison Words likewise similarly comparatively identical	"Lots of similar things, it seems."
Swivel Words however nevertheless yet but still	"Looks like there's going to be a little bit of doubt or 'give back' on the point just made. Better pay attention to this qualifying remark."

(continued)

Table 10.1
Continued

Categories and Examples	When you come across these words, immediately think . . .
Concession Words to be sure indeed though, although granted of course	“Okay! Here comes an argument or two from the opposing point of view.”
Emphasis Words more important above all remember in other words finally	“Looks as though what’s coming up is going to be important.”
Repeat Words in other words it simply means that is briefly in essence as we’ve seen	“Here comes another explanation. Maybe I’ll understand this one a little better.”
Time Words before, after formerly, soon subsequently prior, during meanwhile	“Hmm! A time relationship is being established. Let’s see: What came first, what came last, and what came in-between?”
Place Words above below beyond adjacent to	“Okay! I’ll put these ideas and facts not only in their proper places, but also in their proper relationship.”
Summary Words for these reasons on the whole in conclusion in a nutshell to sum up in short finally	“Good. Now I’ll get a simple wrap-up of the points that have been made. It’s almost sure to be full of key ideas.”
Test Words (lectures) This is important. Remember this. You’ll see this again. Here’s a pitfall.	“Sounds like a potential test item. Better be sure to pay close attention to it.”

What should you do if you can't identify a precise organizational pattern?

Signposts Although identifying the precise organizational pattern can be extremely helpful, it isn't always easy or even possible. Some textbook chapters may defy easy organization, and some lectures can be rambling. In these cases, all is not lost. Keep in mind that your key goal while taking notes is to use cues and patterns to help arrange your thoughts and aid your search for meaning. Luckily, the signposts that often tip you off to a particular organizational pattern can still be helpful even if you have a tough time nailing down the overall arrangement. Table 10.1 lists some common signposts and the directions they're likely to point you in.

Recording Efficiently

What are the key factors in taking notes efficiently?

Depending on whether you're taking lecture notes or textbook notes, you may find that you are short on space, short on time, or both. There are ways that you can take notes more efficiently to avoid any and all of these problems.

How do you make your notes both legible and speedy?

Strive to make your note taking both speedy and sparing. Of course, if you scribble down information too quickly, your notes may be illegible. And if you're too choosy about what you record, you could be left with costly gaps in your information. The way to circumvent these problems and record legible, useful notes at a reasonable speed is to adopt the modified printing style, use telegraphic sentences, and record selectively.

What is modified printing?

Use Modified Printing

Poor handwriting need not keep you from taking legible notes. The *modified printing style* combines the rapidity of writing with the legibility of printing. Letters are formed smoothly, as with cursive or longhand writing, but are punctuated with the sort of stops and starts characteristic of printing. Your words take on a cursive look, and the periodic breaks between letters prevent your writing from eroding into an unreadable blur.

Why is modified printing so effective?

What makes the modified printing style so effective and easy to learn is that it combines your style of printing with your style of cursive in a mixture that brings out the best elements of both. Here's how:

a b c d e f g h i j k l m n o p q r s t u v w x y z

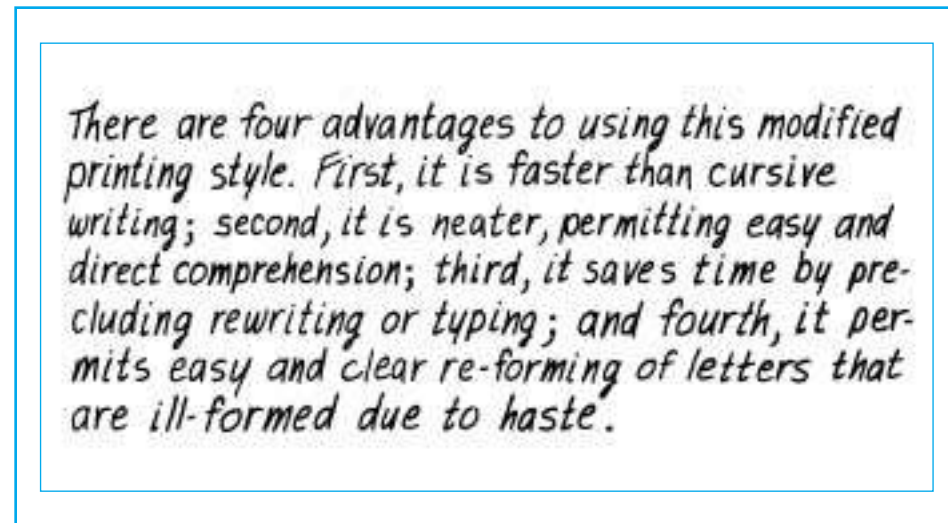
Figure 10.11 shows how modified printing looks in a typical paragraph.

What does it mean to take notes telegraphically?

Take Notes Telegraphically

The best way to take notes is telegraphically. Long before e-mail and the fax machine were invented, important business and personal messages were sent by telegraph. The sender paid by the word; the fewer the words, the lower the

Figure 10.11
Modified Printing Style



cost. A three-word message such as "Arriving three pm" was much less expensive than an eleven-word message: "I will arrive home promptly at three o'clock in the afternoon." Of course, taking notes doesn't cost money, but it does cost time.

To save valuable time when you're taking notes, leave out unnecessary words such as articles (*a, an, the*), abbreviate words you use often (see Figures 10.12 and 10.13), and streamline definitions by using a colon (:) or a dash (—). Two examples of this telegraphic style are shown in Figure 10.14.

Take Notes Selectively

Of course, you can't and shouldn't jot down every word. With textbook note taking it's impractical. In lectures it's an impossibility. Taking thorough notes, regardless of the format you choose, should not mean writing down everything you hear. Your emphasis should be on the ideas, not the words. And you don't want all the ideas, either, just the key ones (as Figure 10.15 shows), along with any details or examples you need to make those ideas easier to understand.

Dealing with Special Cases

Not all note-taking scenarios are ideal. If you can't make it to a lecture or have difficulty taking notes when you do, you need an alternate plan. In the same way, there are factors that can throw a wrench into traditional textbook note taking.

How do you take telegraphic notes?

How do you take notes selectively?

What should you do in special cases?

Figure 10.12
Examples of Technical Symbols

+	plus, positive, and	↕	vibration, motion
−	minus, negative	log	common logarithm
×	algebraic x, or multiplied by	ln	natural logarithm
÷	divided by	€	base of natural logarithms
≠	does not equal	π	pi
≈	equals approximately, approximates	∠	angle
>	greater than, greatly, increased, increasing	⊥	perpendicular to
<	less than, reduced, decreasing		parallel to
~	sine curve, cosine curve	a°	a degrees (angle)
→	approaches as a limit, approaches	a′	a minutes (angle)
≥	greater than or equal to	a″	a seconds (angle)
≤	less than or equal to	∫	integral, integral of, integration
≡	identical to	f	frequency
μ	varies directly as	f _n	natural frequency
∴	therefore	cps	cycles per second
() ^{1/2}	square root	m	mass
() ⁿ	nth root	Φ	phase
vs	versus, against	F	force
≡	ground	/	ratio, the ratio of
↔	varied, variation	≡	base, support, mount, foundation
□	area	(curve, curvilinear

Figure 10.13
Typical Technical Abbreviations

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<i>anlys</i>	analysis	<i>pltg</i>	plotting
<i>ampltd</i>	amplitude	<i>reman</i>	remain
<i>asmg</i>	assuming	<i>rsnc</i>	resonance
<i>cald</i>	called	<i>rltnshp</i>	relationship
<i>cnst</i>	constant	<i>smpl</i>	simple
<i>dmpg</i>	damping	<i>smpfd</i>	simplified
<i>dmnsls</i>	dimensionless	<i>stfns</i>	stiffness
<i>dfln</i>	deflection	<i>systrn</i>	system
<i>dfnd</i>	defined	<i>sgnft</i>	significant
<i>dstrbg</i>	disturbing	<i>ths</i>	this
<i>eftvns</i>	effectiveness	<i>trnsmsblty</i>	transmissibility
<i>frdm</i>	freedom	<i>thrtly</i>	theoretically
<i>frcg</i>	forcing	<i>valu</i>	value
<i>gvs</i>	gives	<i>wth</i>	with
<i>hrmc</i>	harmonic	<i>whn</i>	when
<i>isltr</i>	isolator	<i>xprsd</i>	expressed
<i>isltn</i>	isolation		

Figure 10.14
Examples of Telegraphic
Sentences

Lecture's words

In marketing, we try to understand customers' needs and then respond to them with the right products and services. In the past, firms often produced goods first and tried to fit the customer's needs to the goods. Today's world-class marketers pride themselves on their customer orientation. We begin with the customer and build the product or service from there. A good example is McDonald's, the fast-food chain, which tailors its menus to local tastes and customs when it opens fast-food outlets in Moscow and other international locations.

Student's telegraphic sentences

Marketing understands customers' needs first.

- *In past, firms produced goods first, then fit them to customers.*
- *World-class = having customer orientation.*
- *Ex. McDonald's in Moscow*

Lecture's words

The US Patent Office has granted numerous patents for perpetual motion machines based upon applications with complete detailed drawings. Some years ago, though, the patent office began requiring working models of such a machine before a patent would be granted. Result: No patents granted for perpetual motion machines since that time.

Student's telegraphic sentences

Perpetual motion machine (drawings) = many patents.
Required working model = no patents since.

Figure 10.15
Selective Note Taking

<p>What's sympathetic magic?</p> <p>Describe contagious magic.</p>	<p>Oct. 10 (Mon.) – Soc. 102 – Prof. Oxford</p> <p>A. Two kinds of magic</p> <p>1. Sympathetic — make model or form of a person from clay, etc. — then stick pins into object to hurt symbolized person.</p> <p>2. Contagious magic</p> <p>a. Need to possess an article belonging to another person.</p> <p>b. Ex. Fingernail clippings. By doing harm to these objects, feel that harm can be transmitted.</p>
--	--

What's the best strategy if you have to miss a lecture?

Have a Backup Plan When You Can't Attend the Lecture

If you know you'll be missing a class, supply a friend with a cassette or tape recorder and ask him or her to tape the lecture for you. Then you'll be able to take your own notes when you play the tape back.

How can you cope with a lecturer who speaks too rapidly?

Use the Two-Page System for Fast-Moving Lectures

When you need to scramble to keep up with a fast-talking lecturer, you may find this two-page system helpful. Here's how it works: Lay your binder or notebook flat on the desk. On the left-hand page, record main ideas only. This is your primary page. On the right-hand page, record as many details as you have time for. Place the details opposite the main ideas they support. After the lecture, remain in your seat for a few minutes and fill in any gaps in your notes while the lecture is still relatively fresh in your mind.

Why do instructors assign outside reading?

Take a Different Approach for Supplemental Readings

In many undergraduate courses, assignments and lectures focus on a single textbook, but instructors often assign outside reading in other publications. Reasons for assigning the extra work include the following:

- 1. To amplify topics treated in the textbook or mentioned in class lectures
- 2. To go into greater detail—for example, by assigning original documents or primary sources

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What's the best approach to supplemental readings?

3. To expose students to other points of view or different philosophies
4. To bring background material into discussions

Instructors generally do not expect you to master such supplementary material as thoroughly as you master your textbook. Nevertheless, once the assignment has been made, you must cope with it. Clearly, you cannot spend an inordinate amount of time, but you must learn something from your supplemental reading. Here are some suggestions for doing so:

1. Try to figure out why the book was assigned. You might ask the instructor. If you find out, then you can skim the book, looking for pertinent material and disregarding the rest.
2. Read the preface. As you already know from the previous chapter, the preface provides inside information. It may tell you how this book is different from your textbook.
3. Study the table of contents. Notice especially the chapter titles to see whether they are like those in your textbook. If the chapters with similar titles contain the same information as the chapters in your textbook, read the chapters that do not duplicate your textbook's coverage. (Do this with topics covered in classroom lectures, too.)
4. If you have not yet found an "angle," read the summarizing paragraph at the end of each chapter. Make brief notes on each chapter from the information thus gained. With these notes spread out before you, try to see the overall pattern. From the overall pattern, come up with the author's central thesis, principle, problem, or solution.
5. Don't put the book away with only a vague notion of what it is about. You must come up with something so definite that you can talk about it the next day or write about it two weeks later. Do not waste time on details, but be ready to answer general questions: What was the author's central approach? How was it different from that of your textbook? How was it the same? Look for the central issues around which everything else is organized.
6. Have the courage to think big. If you lack courage, you'll waste time on minor details that you won't remember. Select the big issues and concentrate on them.

When a highly condensed summary of a book or of a long selection is required, you need a special approach. The introduction-thesis-body-conclusion sequence is useful in forcing you to understand the material and the way the author develops and supports it. Furthermore, a summary that follows this sequence can be highly condensed; you may be able to capture the main ideas of a collateral book in only a page or two of notes. Figure 10.16 is an example.

Figure 10.16
Notes in the Form of a Highly
Condensed Summary

Experiment in living close to nature.	<p>I. <u>Introduction</u></p> <p>Thoreau voluntarily withdrew from civilization which he felt was getting too complicated. He spent 2 yrs., 2 mos., and 2 days living at Walden Pond to regain the simplicity of life that comes when one lives close to the soil.</p>
Each man and woman should pause to decide just how they should spend their lives. Are they paying too dearly for unessentials?	<p>II. <u>Thesis</u></p> <p>In a complex civilization, the fast flowing current of unessentials stemming from custom, tradition, advertising, etc., somehow sweeps a person away from the genuine goals in life.</p> <p>Only by temporarily cutting oneself off from civilization, could people realize that their lives need not be so complex. By getting back to nature to rethink the basic issues of life people can chart their course, and attempt to steer their lives in accordance with these standards (not expediences set up by the pressures of complex civilization).</p>
People should awaken and become aware of real life.	<p>III. <u>Body</u></p> <p>Thoreau did not wish to hold up progress or civilization; rather, he wished that people would be more contemplative and selective in their actions.</p> <p>Thoreau chronicled his experiences at Walden Pond. He wanted to become familiar with nature.</p> <p>a. He built his own hut.</p> <p>b. Average cost of living a week was 27 cents.</p> <p>c. He observed nature: trees, birds, animals, etc.</p>
Live simply & you will live more fully.	<p>He believed that every person ought to measure up to the best they could do. What the best is, depends upon the individual. To have a standard to measure up does not mean that all must have the same, but every one should measure up to a standard in the best way she or he is able to.</p>
Urged people to reject unessentials, and get back to fundamentals.	<p>IV. <u>Summary</u></p> <p>Thoreau wanted to demonstrate that many so-called necessities were not necessary at all. He wanted people to observe, appreciate, and evaluate what was important in life. Once people set their sights upon the good life, they should follow their sights without compromising.</p>



Pulling Things Together

Why is it a mistake to end your note taking abruptly?

As a lecture draws to a close or a chapter comes to an end, there's a great temptation to just pack up and move on. That may be understandable, but it can prove to be a great waste of an especially valuable time.

Leaving Lectures

What should you do at the end of a lecture?

The closing minutes can sometimes prove to be the most important part of an entire lecture. Speakers who do not pace themselves well may have to cram half the lecture into the last five or ten minutes. Record such packed finales as rapidly as you can. After class, stay in your seat for a few extra minutes to write down as much as you can remember.

What should you do once you've left the lecture room?

As soon as you leave the lecture room, while walking to your next class, mentally recall the lecture from beginning to end. Visualize the classroom, the lecturer, and any chalkboard work. After mentally recalling the lecture, ask yourself some questions: What was the lecturer getting at? What was the central point? What did I learn? How does what I learned fit with what I already know? If you discover anything you don't quite understand, no matter how small, make a note of it and ask the instructor to explain it before the next class.

Finishing Readings

How do you conduct a quick overview of a reading assignment?

After you've completed a reading assignment, step back and quickly overview what you've just read. Here are two ways to do so:

1. *Reread the abstract, introduction, or summary.* Any of these three common elements provides a brief overview of what you've just read and puts the ideas you've picked up in an appropriate context.
2. *Reread the title and headings.* If the text doesn't include an obvious overview, create one yourself by rereading the title, headings, and subheadings. In combination, these elements can help you mentally organize the information you've just learned. Don't spend a great deal of time doing this rereading. The primary purpose is to refresh your memory of the important points so that you'll be able to focus more carefully on them later. If you find you have questions, jot them down so you can ask them in class.

Summing Up

What are the basic steps in taking lecture and textbook notes?

Despite some obvious differences, the core concepts that underlie taking lecture notes, taking textbook notes, and marking up your textbook are remarkably similar. If you are careful to devise a system and stick with it, to gather information actively, efficiently, and flexibly, and to pull things together conscientiously at the end of a note-taking session, the handful of steps below should put you in a powerful position to master your notes and make them your own.

How to Take Lectures Notes

Figure 10.17 is a flow chart of this process.

- 1. **Record.** Put the lecturer’s ideas and facts (along with any relevant diagrams) in the six-inch column of your Cornell System note sheet.
- 2. **Remember.** As soon as class is over, take a moment to mentally recall the entire lecture from start to finish.
- 3. **Refine.** Looking over your note sheets, add words, phrases, and facts you may have skipped or missed, and fix any difficult-to-decipher jottings.

Figure 10.17
Taking Lecture Notes

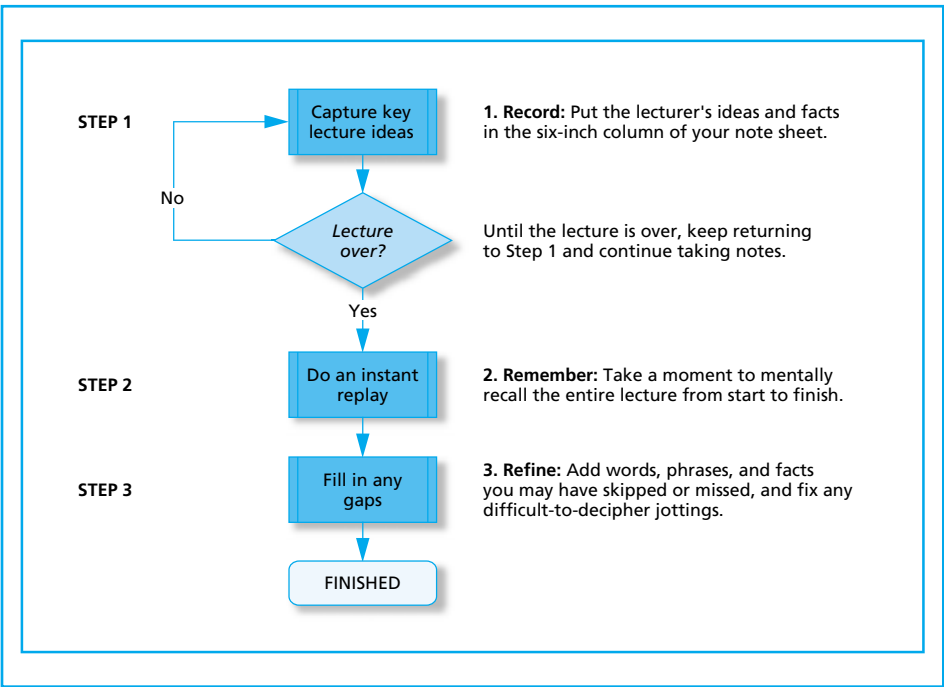
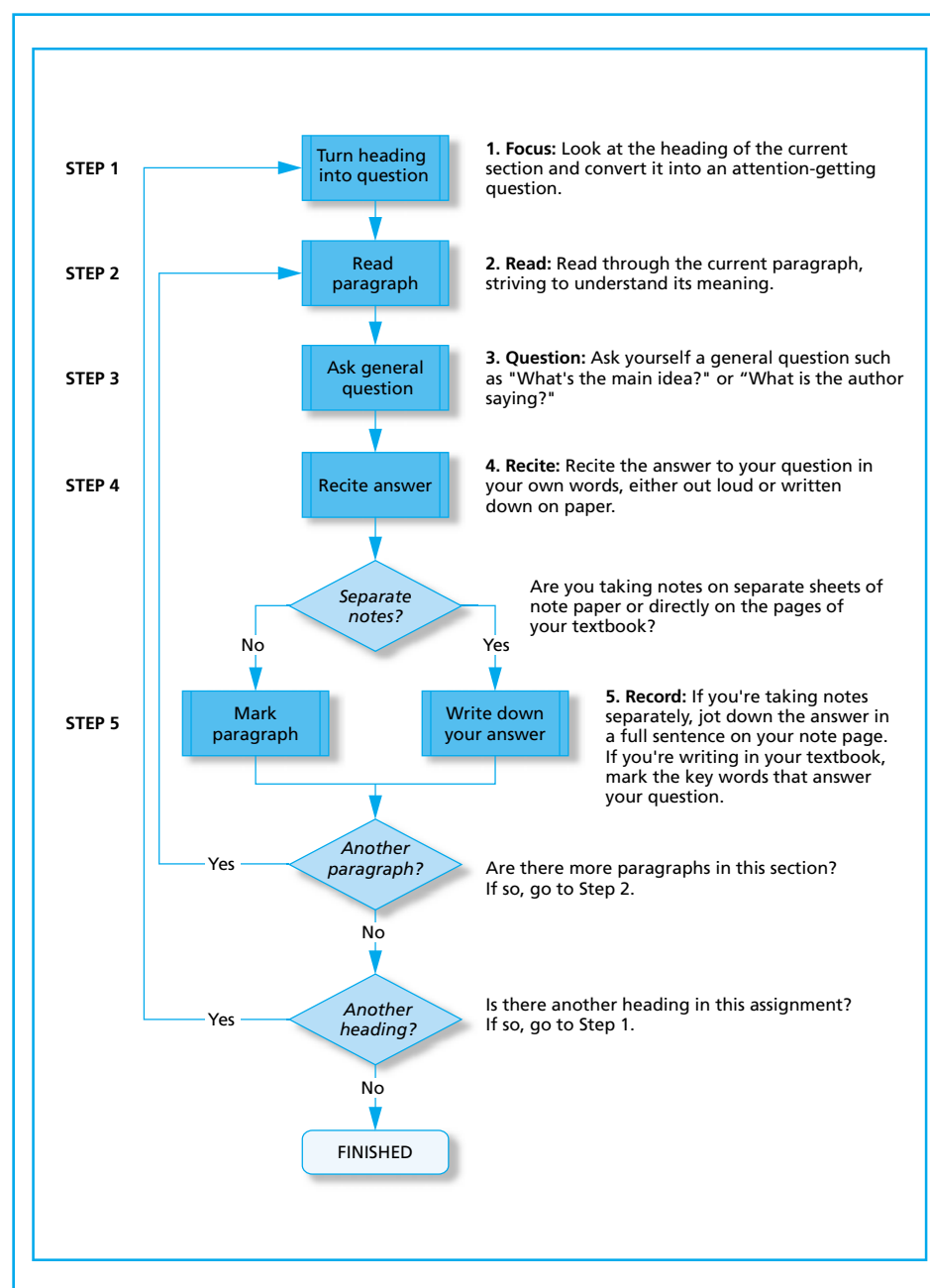


Figure 10.18
Taking Textbook Notes



How to Take Textbook Notes

Figure 10.18 shows how this process works for textbook marking and separate notes.

1. **Focus.** As you read through each section, turn the headings and subheadings into attention-getting questions that help stimulate your thinking and your curiosity as you read on.
2. **Read.** Move through the assignment a paragraph at a time, striving to understand the meaning of the current paragraph.
3. **Question.** Before you move on to the next paragraph, take a moment to ask yourself, “What’s the main idea?” or “What is the author saying?”
4. **Recite.** Recite the answer to the question you just asked, in your own words and preferably out loud.
5. **Record.** If you’re marking your textbook, find the words or phrases in the paragraph that support your recited answer and mark them. If you’re taking separate notes, jot down the answer you’ve just recited in the six-inch column of your Cornell System note sheet. Then repeat the entire process until you have completed the assignment.

FINAL WORDS

What does taking effective notes require?

Despite indisputable benefits, taking effective notes can be difficult for many students. Of course, most students take some sort of notes when they attend lectures; and a smaller number do so when they’re reading. But in each case, the students who take notes often come close but don’t reach the point where their notes are truly effective. Taking effective notes requires work; it requires time; and it forces you to be actively engaged in what you’re reading or listening to. This can be a little daunting, especially when you may already have a false sense of accomplishment from half-baked notes or markings. Take that final step. Cross that threshold and make your note taking truly effective. You’ll be working harder initially, it’s true. All new skills require a little extra effort at the outset. But the benefits you derive will materialize almost immediately when you begin to master the notes that you have taken and make your new knowledge permanent instead of just fleeting.

HAVE YOU MISSED SOMETHING?

SENTENCE COMPLETION

Complete the following sentences with one of the three words listed below each sentence.

- 1. The Leon-Clyde story illustrates the rapidity and scope of _____.
note taking concentration forgetting
- 2. Words such as *next*, *thus*, and *finally* often function as _____.
signposts diversions intonation
- 3. The margin area at the outside of each page should be reserved for _____.
reminders questions definitions

MATCHING

In each blank space in the left column, write the letter preceding the phrase in the right column that matches the left item best.

- | | |
|-----------------------|--|
| _____ 1. Socratic | a. Time-tested system for recording and mastering your notes |
| _____ 2. Drawings | b. Ancient method that uses questions and answers to promote understanding |
| _____ 3. Summary area | c. Provide clues for the organization of a chapter or lecture |
| _____ 4. Telegraphic | d. Used for distilling a page's worth of notes down to a few sentences |
| _____ 5. Two-page | e. The only note-taking format that is explicitly discouraged |
| _____ 6. Outline | f. Can succinctly describe ideas that are difficult to put in words |
| _____ 7. Signposts | g. System for taking notes in especially fast-paced lectures |
| _____ 8. Cornell | h. Note-taking style that employs only the most essential words |

TRUE-FALSE

Write T beside the true statements and F beside the false statements.

- _____ 1. Memory alone is sufficient for holding on to key ideas from textbooks and lectures.
- _____ 2. It's unlikely that a chapter or lecture will fit into a single note-taking format.
- _____ 3. A sketch can rarely convey locations or relationships as clearly as a few sentences.
- _____ 4. The "you" who took your notes may not be the same "you" who reviews them.
- _____ 5. You're seldom expected to read supplemental materials as thoroughly as your textbook.

MULTIPLE CHOICE

Choose the word or phrase that completes each sentence most accurately, and circle the letter that precedes it.

- 1. To take notes effectively, you need
 - a. a loose-leaf notebook.
 - b. a system.
 - c. sheets of unlined paper.
 - d. several fundamental questions.
- 2. As you're taking notes, the cue column should
 - a. remind you.
 - b. get wider.
 - c. remain empty.
 - d. be filled.

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3. One advantage of taking notes directly in your textbook is that
 - a. your book is more valuable when you sell it at the end of the semester.
 - b. your notes and your textbook can travel together as a unit.
 - c. you can use a highlighter to single out important ideas and concepts.
 - d. as the term progresses, your knowledge is likely to grow.
4. The story of Eddie Rickenbacker underscores the importance of
 - a. airlines.
 - b. correspondence courses.
 - c. questions.
 - d. textbook note taking.
5. Modified printing is
 - a. speedy, like writing.
 - b. neat, like printing.
 - c. easy to learn.
 - d. all of the above.

SHORT ANSWER

Supply a brief answer for each of the following items.

1. Discuss the principal components of the Cornell System.
2. Explain the various formats for taking notes.
3. Explain how organizational patterns can help increase understanding of lectures and readings.
4. Contrast the process of taking lecture notes with that of taking textbook notes.

WORDS IN CONTEXT

From the three choices beside each numbered item, select the one that most nearly expresses the meaning of the italicized word in the quote. Make a light check mark (✓) next to your choice.

No amount of *sophistication* is going to *allay* the fact that all your knowledge is about the past and all your decisions are about the future.

—Ian E. Wilson (1941–), chairman, General Electric Corporation

- | | | | |
|--------------------------|----------|------------|------------|
| 1. <i>sophistication</i> | argument | refinement | discussion |
| 2. <i>allay</i> the fact | change | resolve | relieve |

There is always an easy solution to every human problem—neat, *plausible* and wrong.

—H. L. Mencken (1880–1956), American editor and critic

- | | | | |
|---------------------|------------|-------|--------------|
| 3. <i>plausible</i> | reasonable | smart | advantageous |
|---------------------|------------|-------|--------------|

A committee is a *cul-de-sac* down which ideas are lured and then quietly strangled.

—Sir Barnett Cocks (1907–), English scientist

- | | | | |
|------------------------|------|-----|----------|
| 4. a <i>cul-de-sac</i> | trap | net | dead end |
|------------------------|------|-----|----------|

THE WORD HISTORY SYSTEM

Anecdote

unpublished notes

anecdote an'-ec-dote' *n.* 1. A short account of an interesting or humorous incident. 2. Secret or hitherto undivulged particulars of history or biography.



Even among the ancient Greeks there were two kinds of stories—those given out publicly and those known only privately. The latter kind was called *an-ekdotos*, “not published.” The word was formed by combining *a*, *an*, “not,” and *ekdotos*, “given out.” From this source comes French *anecdote* and thence English *anecdote*, which originally retained the Greek significance of “unpublished narratives.” But an “unpublished narrative” especially about interesting things and famous people, has a ready market; so *anecdotes* are eagerly brought out on every occasion, and the word loses its original sense, coming to mean simply “a story,” “an incident.”

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