hy take notes? Why not just sit back and listen intensively? This section answers your questions.

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THE IMPORTANCE OF NOTES

The primary goal of note taking is to provide you with a written record of what you've heard. Your short-term memory isn't equipped to retain all the ideas in a typical lecture. As a result, 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? Who would rely only on his or her memory in any academic course? Carefully controlled research further points out memory's fragility. Experiments have shown that unrehearsed information is sometimes forgotten in as little as twenty seconds. In a classical experiment, Hermann Ebbinghaus examined the rate of forgetting by studying how easily he could relearn alist after different time intervals. At first, forgetting was rapid and occurred within almost the first hour, but after eight hours, further forgetting occurred at a relatively slow rate, In short, Ebbinghaus found that almost half of what is learned is forgotten within an hour. 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 of them 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, they 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 from the anecdote, the only sure way to overcome forgetting is by taking notes and then studying and reciting them.

USING THE CORNELL SYSTEM

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

The best way I know of to ensure that the notes you take are useful is by adopting the Cornell note-taking system, which was developed at Cornell University more than forty years ago. Since then the Cornell System has been adopted by countless colleges and universities not only in the United States but also in other countries, including China. Although the system is far-reaching, its secret is simple: Wide margins on the left-hand side and the bottom of each page provide the keystone.

Although many office and school supply stores now sell Cornell-style note paper, 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 ead1 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 your notes should be taken. Figure 10.1 shows a Cornell note sheet.

THE CORNELL SYSTEM FOR TAKING NOTES IN STEPS

The Cornell note-taking system is more than a sheet of paper on which to take notes. It is a system that efficiently takes you through a completely natural learning cycle on the same sheet of paper.

Include a Cue Column

The cue column is a two-and-one-half-inch margin on the left-hand side of each page of your note sheets. It helps to ensure that you will actually put the notes to good use instead of simply stashing them away in a notebook until test time.

- First, capture the lecturer's ideas and facts in the six-inch column.
- Second, at your next free period or at the latest during your evening study time, read over your notes to fill in any gaps and to make words more legible. Do this while the lecture is still relatively fresh in your mind.
- Third, determine the first main idea put forth by the lecturer. Then in the cue column write a question based on the main idea.
- Fourth, with a plain sheet of paper, block out the notes in the six-inch column, leaving exposed only the question in the cue column. Now glance at the question, then recite aloud, in your own words, the idea or fact needed to answer the question. After reciting, slip the plain sheet down to check your recitation. If your answer was incorrect or incomplete, cover the notes and recite again. It is important to establish an accurate, crisp, dear image in your memory at the very beginning.
- Fifth, at the bottom of the sheet, write a summarizing statement-a concise, in-a-nutshell version of a page full of notes. These summaries will make the studying for your exams, especially the final one, remarkably efficient. Furthermore, by writing summaries, you will become a better thinker and writer.
- Sixth, review your notes immediately so that you end up with a view of the whole rather than isolated facts and ideas. In addition to getting a global view, an immediate review impresses the fresh lecture in your memory. As you learned in Chapter 5, yesterday's knowledge interferes with today's knowledge and today's interferes with yesterday's. The battle between remembering and forgetting goes on continuously. The only way you can influence the outcome of this battle is by reviewing your notes regularly. No matter how busy you are, make it a habit, before settling down to study, to make a quick review of your previously taken notes on the subject you're about to study. Short, fast, frequent reviews will produce far better under-standing and remembering than long, all-day or all-night sessions.
- Last, start the process of reflection. Ask yourself: What's the significance of these facts and ideas? What principles are they based on? How can I apply them to what I already know? How do they fit? What's beyond these facts and ideas?

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 may be left with costly gaps.

As you're taking notes, keep the cue column empty. But when you review and recite what you've jotted down, draw questions from the ideas in your notes, and write them in the cue column. Writing questions helps clarify meanings, reveal relationships, establish continuity, and strengthen memory.

Leave Room for Summaries

The two-inch space at the bottom of each note sheet is the summary area, in which you sum up each page of your notes in a sentence or two. The Virtues of the summary area are twofold. Not only does it provide a convenient in-a-nutshell version of a page full of notes; it also helps you step back and look at the implications of what you've written down. There's always a danger that in paying close attention to the specific facts and details that make up your notes, you lose sight of their overall meaning. By encouraging you to look at "the big picture," the summary area provides perspective and helps avoid this potential note-taking pitfall.

Create a Flexible Note-Taking Area

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 take 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. Figures 10.2 and 10.3 show notes taken on a Cornell note sheet for two different subjects.

In general, however, avoid taking notes in outline form because this forces you to fit the material into a highly regimented pattern. It's fine to indent and even number your notes, but don't get so caught up in numbers, letters, and Roman numerals that you overlook content.

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

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