

HOW TO STUDY IN COLLEGE

*Sixth
Edition*



W A L T E R P A U C K



How to Study in College

SIXTH EDITION

WALTER PAUK

Cornell University, Emeritus

Houghton Mifflin Company Boston New York



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To the Instructor of the Sixth Edition _____

Time after time, students have told me that by learning a particular technique for taking useful notes or reading and retaining a textbook assignment they have achieved major breakthroughs. Moreover, these breakthroughs in a particular subject often jump-start the entire learning process and extend to all other subjects.

Students who are seeking help are not primarily interested in theory, and most of them have little patience with merely inspirational talk. They want practical instruction on how to succeed academically. They want something that they can readily understand and apply and that works. After a week of classes, they discover that the hit-or-miss tactics that got them through high school are grossly inadequate and inefficient at the competitive college level. So they turn to us for help.

Let's then teach these students proven techniques for studying and learning.

How to Study in College is brimming with exciting techniques, based on widely tested educational and learning theory, that have already helped myriad students. But the tail of theory is never allowed to wag the practical, feet-on-the-ground dog. While theory is always implicit and is sometimes given in enough detail to explain the rationale behind a particular technique or reassure the skeptic, it is never presented without explicit applications and never used simply as exhortation. After all, the person who needs penicillin is hardly cured by learning the history of antibiotics!

Because it is so crucial that students learn for the long term, I am wholeheartedly against techniques that stress mere memorization. Such techniques fill the mind with "knowledge" that melts away after a test and leaves learning still to be done. The techniques presented in this book result in real learning. And real learning, like a real diamond, lasts.

Finally, no textbook—no matter how complete or current—is truly useful if it is boring, confusing, or excessively difficult to read. I have therefore tried to write in a conversational tone so that reading this book is like having a sincere, person-to-person chat.

WHAT'S NEW OR DIFFERENT IN THE SIXTH EDITION?

- The "To the Student" introduction has been reoriented. It starts by bringing in the personal concept of "the will to learn" and there's a ten-item

self-assessment inventory, which greatly aids students in identifying their basic learning style.

- “Setting Goals—A Self-Management Skill” is a brand-new chapter on a vital subject, the importance of which, like a last will and testament, is unarguable. Nevertheless, goal setting is subject to intense procrastination. Two quotations from Norman Vincent Peale’s *Positive Imaging* provide convincing wisdom not only for drawing up one’s goal or goals but also for taking vigorous action to achieve them. Then there are about twenty question-and-answer paragraphs and illustrations to aid students in formulating their academic and lifetime goals.
- The chapter “Improving Your Reading Speed and Comprehension” was brought back from the Fourth Edition. It is packed with so much great research and so many classical approaches to better reading and better comprehension that every new class of college students should have the chance to benefit by reading, thinking, and applying the techniques that best fit their individual learning styles.
- “Understanding and Using Key Concepts” is not only a brand-new chapter; it is a brand-new concept. As many of you know, almost all sound learning systems incorporate at least three principles to make learning understandable and memorable: recitation, reflection, and questioning. Obviously, during the actual presentation of, say, the Cornell Notetaking System, it takes too much time and space to explain fully any one of these principles. However, with a separate chapter to explain the importance of these principles, students will gain a thorough understanding of them in advance, so when the words *recite*, *reflect*, and *question* are mentioned in any system, understanding will be swift and complete.
- Part IV, “Your Lecture Notes,” comprises two chapters, “Listening to Take Good Notes” and “Taking Good Notes.” Notetaking is too important to discuss in one chapter; therefore, we have back-to-back chapters.
- Part V, “Your Textbooks,” consists of three important chapters: “Learning from Your Textbook,” “Noting What’s Important in Readings,” and “Thinking Visually.” Students’ academic success hinges upon mastering their inevitable textbook assignments, and these three chapters provide the principles and techniques for achieving success with efficient certainty.
- Three things are different in this edition regarding vocabulary development. First, I have reassembled the vocabulary chapter, “Improving Your Vocabulary,” as a unit rather than distributing the topic throughout the book. My approach allows students to see and read the components of

the chapter in full context. Second, at the end of each chapter you will find a vocabulary exercise composed of twenty-five words taken from (1) the chapter itself, (2) *Time*, (3) *Forbes*, (4) *New York Times*, (5) *Wall Street Journal*, and (6) Elizabethan poetry. These words are practical and can be used by students in writing term and research papers, as well as in their speech. Third, the last component in Chapter 6, "Vocabulary Development," features *word origins*, which frequently creates in many students a permanent interest in words. In the section "To the Student" students are encouraged to use a 3×5 card system for gathering words supported by word histories.

- The chapter "Studying Literature With the *Evoker* System" is mentioned here because of several strong requests to include it in this text. As one professor has noted, "The fundamental nature and the practicality of the *Evoker* does for literature what the Cornell Notetaking System does for lectures and the Questions-in-the-Margin System does for textbook assignments." The big advantage of the *Evoker* system is that it provides a systematic, step-by-step way for students to begin breaking down a literary passage to see how the author put it together in the first place.
- In this book, the principles, systems, and techniques are the vital determinants that will enable students to succeed academically. When these determinants are mentally absorbed, students can then use and adapt them to fit their learning styles. It is *not* the end-of-the-chapter exercise that will have a permanent effect on the students. It is the basic, sound principles, systems, and techniques. This is why the chapters are not diluted but rather kept crisp and compact, and uncluttered. I think we all agree that for a program to be successful, it must have basic soundness. Actually, no one knows what is the best way for any individual student to learn. Therefore, our mission should be to present clearly the best principles, systems, and techniques and then let students use them in their own personal and unique ways.
- Each "Have You Missed Something?" chapter quiz includes questions to reinforce students' understanding of key concepts. The rationale for these questions is NOT to test but rather to teach. If the chapter is read with care and understanding, then any student should achieve a perfect score.
- The "concept map" technique has been continued in this edition. It would be good to remind the students that much can be gained from these maps, both before reading the chapter and, perhaps even more, AFTER reading the chapter. Before reading the students can gain *advance organizers*, which, according to David P. Ausubel, can help them learn and remember material they encounter in the chapter itself. After reading

the chapter, the concept maps provide a bird's-eye view of the entire chapter when the main concepts are shown with linking lines that establish relationships.

- Chapter 18, "Studying Mathematics," has been revised by Dr. Susan Piliero who now teaches the same course in mathematics at Cornell University that Dr. Harrison A. Geiselmann, the original author of the chapter, taught for more than thirty years.
- Chapter 19, "Learning With the Computer," has been extensively revised.

ACKNOWLEDGMENTS

Warm and sincere words of thanks go to those who are permanently linked to this book: the late Henry F. Thomas and Ian D. Elliot.

My sincere thanks also go to the contributors of material in previous editions: Dr. Harrison A. Geiselmann and Professors Kenneth A. Greisen and Jane E. Hardy, all of Cornell University; Professor William G. Moulton of Princeton University; Professor James A. Wood and Dr. Nancy V. Wood, both of the University of Texas at El Paso.

I am very pleased that the original work done by a valued friend, John Rethorst, and my esteemed colleague Professor H. Dean Sutphin, both of Cornell University, still forms the basis of the revised Chapter 19, "Learning with the Computer." Professors Mike Radis and Ron Williams of The Pennsylvania State University prepared the "Questions for Further Study and Discussion" that first appeared in the Instructor's Resource Manual for the Fourth Edition. Professor Carol Kanar of Valencia Community College assisted with the updating and revising of Chapter 1 in that edition. I thank them all for their valuable assistance.

Now for a very special acknowledgement: I am very grateful to my friend Ross James Quirie Owens, whose experience as a writer, newspaper editor, director, cinematographer, and, currently, managing editor of *InfoWorld* (a publication devoted to computers) prepared him to take full charge in revising, editing, and improving the Fifth Edition. His talents are still particularly apparent in the Sixth Edition—in the mini-overviews and concept maps at the beginning of each chapter and in the quizzes at the end of each chapter. He also revised the quizzes and questions in the Fifth and Sixth Editions of the Instructor's Resource Manual.

I would also like to thank the reviewers of the Sixth Edition for their fine suggestions:

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Finally, I am eternally grateful to my many students who have taught me much—so that I may pass on a little more to others.

W.P.

To the Student _____

How did Helen Keller learn to read and communicate, in spite of being blind and unable to hear? Why did Abraham Lincoln walk twenty miles to borrow a book? How did Booker T. Washington, born in slavery, travel five hundred miles to a high school where he could get the education he craved? Each was motivated by the will to learn. Each so desired learning for its own sake that he or she allowed few things to interfere with that goal.

Perhaps you know people like Keller, Lincoln, or Washington. Perhaps you are such a person yourself. If you are, you have already discovered that the desire to learn can give you the strength to start projects, see them through during difficult spots, and finish them with satisfaction. In college, you are likely to find that the will to learn—perhaps more than any other single factor—will help you the most, particularly when you falter from time to time. On a cold winter morning, it's far easier to get out of bed if you want to ace a midterm than if you don't really care about your performance!

USING THIS BOOK

No matter what academic goals you've set for yourself, this book can help you achieve them. In theory, there is no limit to learning and no limit to how you can improve your natural abilities to understand the material you study. By applying the techniques presented here, you will quickly begin to improve as a student, making your college experience a rewarding one.

HOW TO USE THE "HAVE YOU MISSED SOMETHING?" QUESTIONS

The end-of-chapter questions are designed to teach, not test; you'll find no trick questions and no traps to lead you to an incorrect answer. Take each question at face value and answer it to the best of your ability. Use any incorrect answers you give as opportunities to reread the pertinent portion of the chapter. By rereading and rethinking the question and answer, you will greatly strengthen your understanding of the entire concept.

A SECOND CHANCE

The Nine-Dot Problem not only demonstrates a point; it is also an excellent learning device. For instance, though very few students have solved the

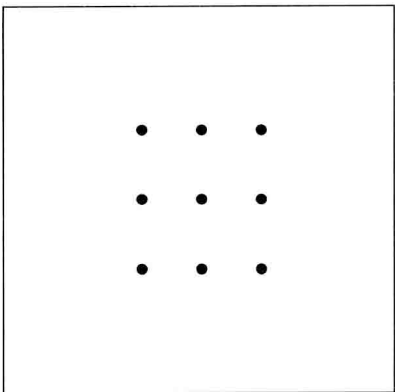


FIGURE 1 The Nine-Dot Problem
Connect these dots by drawing four straight lines without taking your pencil from the paper and without retracing any lines. The solution appears on page xxv.

puzzle, they nevertheless have learned to break out of the conventional-thinking mold and let their minds rove more freely, which leads to more innovative and imaginative approaches to solving problems.

To prove that you, perhaps, have learned a great deal from this one puzzle, apply your new-found knowledge to the following problem.

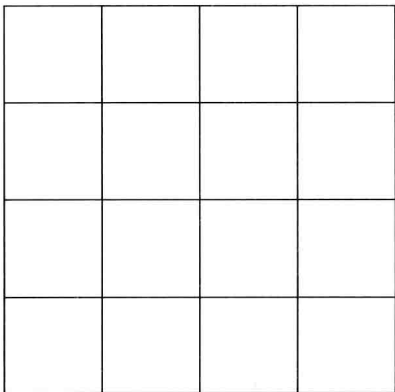


FIGURE 2 The Puzzle of Squares
How many squares are there in this figure? The solution appears on page xxvi.

DISCOVER YOUR OWN RESOURCES

“Know thyself” is wise advice for a student poised at the path that leads to an academic goal. Development of your skills begins with understanding your personal learning style and study skills. By identifying your preferences and strengths, you can zero in on the best study skills techniques for you.

The following list can help you identify your basic learning style. For each item, circle the letter that best matches your style. Keep your responses in mind as you read this book.

Learning Styles Self-Assessment

1. I study better (a) by myself; (b) in groups; (c) in a combination of the two.
2. I remember best when (a) I've *heard* something; (b) I've *read* or *seen* something; (c) I've *done* something active, like problem solving.
3. I think I'm (a) better with facts, such as names or dates; (b) better with concepts, ideas, or themes; (c) about the same with both.
4. I learn better when I read (a) slowly; (b) quickly; (c) either way.
5. I study more efficiently in (a) one solid study period; (b) small blocks of time.
6. I work (a) well under pressure; (b) poorly under pressure.
7. I work (a) quickly, for short periods of time; (b) at a steady, slower pace for longer periods of time.

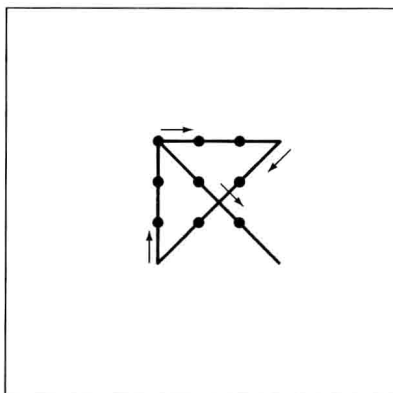


FIGURE 3 Answer to the Nine-Dot Problem
Begin at the top left corner and follow the arrows.

8. I (a) do learn best in a structured setting, such as a classroom or laboratory; (b) do not learn best in a structured setting.
9. I think that the greatest strength of my learning style is _____.
10. I think that the greatest weakness of my learning style is _____.

You'll improve your chances of success if you balance this knowledge of your learning style with a willingness to remain flexible. For example, you may be thinking, "It's true. I'm a sprinter who begins working with a burst of energy and then slacks off. That's the way I've always been. How can I possibly change?" Or you may believe that studying all night is an effective way of coping with a tight schedule and that you have no need for a more conventional strategy. These ways of thinking probably feel comfortable but they may have created blind spots in your view of studying. To get a sense of how blind spots can limit you, try to solve the problem shown in Figure 2. Odds are that a blind spot will prevent you from solving it. Yet once you see the solution, you'll probably say, "How easy! Why didn't I think of that tactic myself?"

TAKE ADVANTAGE OF YOUR SCHOOL'S RESOURCES

College Catalog General information about your college's requirements, policies, programs, and services appears in the college catalog. Make sure you have a copy and use it often during the first weeks of classes to remind yourself of requirements and deadlines to be met.

Student Handbook The student handbook provides information about your school's procedures, regulations, and code of conduct. It may also describe the school's requirements for good academic standing and graduation. For details or for specific department requirements, consult your department office or your academic advisor.

1 × 1 squares	16
2 × 2 squares	9
3 × 3 squares	4
4 × 4 squares	1
<hr/>	
Total squares	30

FIGURE 4 Answer to the Puzzle of Squares: 30 squares.

Admissions or Registrar's Office You can find answers to questions about grades, transcripts, and college requirements in the admissions or registrar's office. Admission to college and registration for courses begin with this office.

Office of Financial Affairs For answers to questions about scholarships, loans, and grants, contact the financial affairs office. You will come here to pay fees and fines and to pick up your checks if you are in a work-study grant or program. If you want a part-time job on campus for which you must qualify on the basis of your financial status, you will fill out application forms in this office.

Career Development and Placement Office If you want help choosing a major or setting a career goal, contact the career development and placement office. People in this office can administer various interest, personality, and skills assessment tests to help you determine the kind of work for which you are best suited. They can help you find jobs on and off campus. Some career development centers sponsor on-campus recruitment, inviting businesses to interview prospective graduates and aiding them in submitting applications and résumés. After graduation, you can file a résumé in the placement office if you want your school's help in landing a job.

Academic Advising Office or Counseling Department Academic and guidance counselors can help you with everything from choosing the right course to solving personal problems that prevent you from meeting your academic goals. The academic office or counseling department may be part of the admissions office, or it may be a separate department. In many colleges students are assigned to an advisor or a counselor who follows their progress throughout their college careers.

Student Health Center If you become ill, you can go to a doctor at the health center. The health center may have a pharmacy and may provide a limited amount of hospital care. Some mental health services may be available through this center, through the office of a school psychologist or psychiatrist, or through a peer counseling group. The health center may also refer students to an agency outside the college.

Student Government Association Working with the dean of students, the student government association sponsors student activities such as intramural events, dances, special-interest organizations and clubs, and other social and academic events. (Joining a club or taking part in campus events is a good way to meet other students who share your interests.) In addition,

your student government may publish a weekly bulletin or a student handbook that summarizes college requirements and resources.

Student Publications The college newspaper or literary magazine offers contributors unique opportunities for self-expression and provides readers with information and entertainment. Serving on the editorial staff of one of these publications may also fulfill some journalism or English requirements.

Learning Lab or Skills Center You may turn to the learning lab or skills center for help in improving your study, reading, writing, math, or computer skills. Whether you are required to spend time in a lab because of your performance on a college skills assessment test or you choose to go on your own, take full advantage of the opportunity to gain the skills you need.

Special Student Services Veterans, students with physical or learning disabilities, minority students, international students, and students who are economically disadvantaged may need the special assistance of a trained support group to meet their academic goals. If you think you qualify for these services, ask your counselor or advisor about them. Your college may also offer services such as off-campus residence listings.

Athletics Office A listing of the college's athletic programs and events is available in the athletics office. This is the office to visit if you are interested in participating in sports.

Resident Assistant For on-campus students, resident assistants (RAs) can be a great source of information about campus services. Although RAs are not professional counselors, they have recently been through many of the experiences you're undergoing and can probably direct you to the campus office best suited to your needs.

A FINAL THOUGHT

To state in one sentence what I try to do in this book, let me rely on the words of Ralph Waldo Emerson: "The best service one person can render another person is to help him help himself."

VOCABULARY DEVELOPMENT USING THE WORD ORIGINS SYSTEM

Thirty college-bound seniors placed in the highest percentile on their final standardized vocabulary test after using the Word Origins System for only six weeks.

The improvement in vocabulary came about because of a genuine *interest* in words, developed by perusing at least one of the books listed:

Holt, Alfred H., *Phrase and Word Origins*, 1961, Dover Publications, Inc.

Morris Dictionary of Word and Phrase Origins. New York: Harper & Row, Publishers, 1977, 654 pages. By William and Mary Morris. Ask the librarian for other books or dictionaries on word origins.

Oxford English Dictionary, 20 volumes, ed. J. A. Simpson & Edmund S. Weiner, 22,000 pages, 1989. Not in all libraries, but try this classic dictionary when you find time.

These students were told as they read the word histories to picture in their minds how they would illustrate each word as if they were artists. The theory is, of course, that a mental picture of a word created this way would be implanted in their long-term memory.

HOW WORDS TURNED ONE MAN'S LIFE AROUND

Malcolm X developed a powerful vocabulary while in prison. He said, "A prisoner has time that he can put to good use. If he's motivated, he can change his life."¹ In an interview with Alex Haley, Malcolm X said:

People don't realize how a man's whole life can be changed by *one* book." He came back again and again to the book that he had studied when in prison. "Did you ever read *The Loom of Language*?" he asked me and I said I hadn't. "You should. Philology, it's a tough science—all about how words can be recognized, no matter where you find them."²

Malcolm X went on to become an outstanding preacher and public speaker. With a wide and exact vocabulary, he was able to express his thoughts and ideas forcefully and intelligently. He earned and commanded respect.

HOW TO USE THE WORD ORIGINS SYSTEM IN THIS BOOK

An interest in words, which I hope you will gain from this book, supplies the motivation and natural desire to look at words, not as common coins, but as something special, usually provoking the question, "I wonder where

¹*The Autobiography of Malcolm X with the Assistance of Alex Haley*. A One World Book published by Ballantine Books, copyright 1964 by Alex Haley and Malcolm X, pp. 453–4.

²*Ibid.*

that word came from?" Once you're interested, your vocabulary will quickly and naturally grow in both size and precision. Words become a joy.

How can you capitalize on this opportunity? As you work your way through the twenty-five words on the vocabulary quiz, an occasional word or two might appeal to you as *your type of word*. This is a word you'd like to master so that you can use it in your speaking, writing, and thinking.

Take a 3 × 5 card (which you can easily carry for study in spare moments) and write on one side the phrase in which the word is embedded. You want context. Underline the target word.

After you've collected five or six of these words, find time for some library work with dictionaries.

On the front of the card, make sure that you write the word in syllables, including accent and diacritical marks so that you can pronounce it correctly.

The reverse side belongs to the word's history. However, at the very bottom of the card write the present definition, which you can get from any good "collegiate" or unabridged dictionary. (See illustration for form.)

(FRONT)

Don Quixote and his faithful
companion, Sancho Panza

com-pan'ion

(REVERSE)

companion: one who shares bread with another.

"Breaking bread" together is an ancient rite of friendship.

com = with

panis = bread

Now: one who accompanies another with no longer a reference to sharing bread.

(FRONT)

escape from Alcatraz
was impossible.

es-cape'

(REVERSE)

escape: to slip out of one's cape.

The word gives us a picture of a prisoner, held by his cape or coat, who suddenly slips out of the garment and flees.

Latin: ex cappa = out of one's cape or cloak

Now: to break loose from confinement; get free.

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