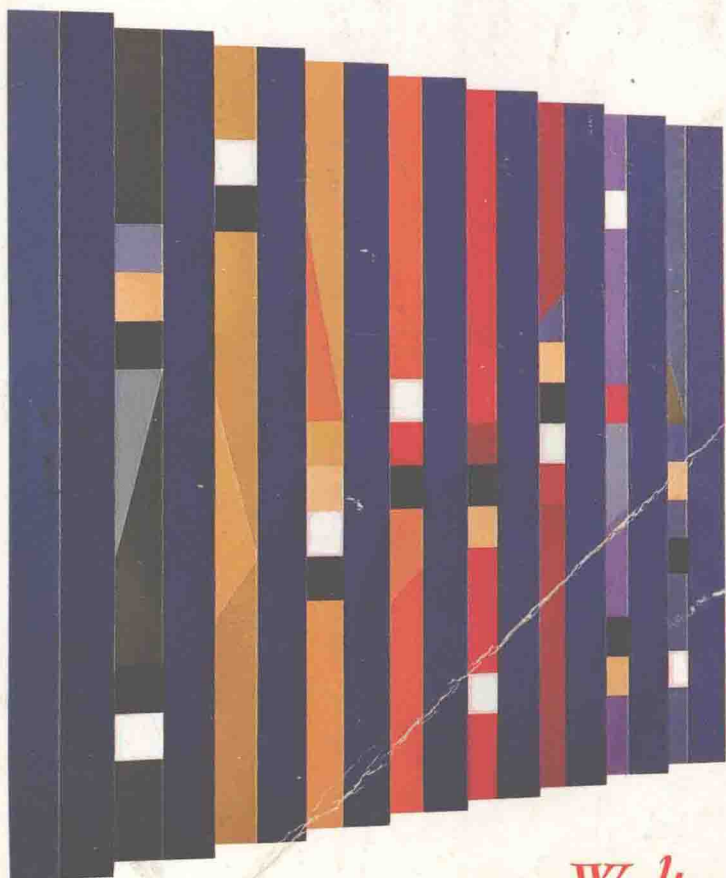


HOW TO STUDY IN COLLEGE

F I F T H E D I T I O N



Walter Pauk

How to Study in College

FIFTH EDITION

Walter Pauk

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Houghton Mifflin Company Boston Toronto
Dallas Geneva, Illinois Palo Alto
Princeton, New Jersey

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Senior manufacturing coordinator: *Marie Barnes*
Marketing manager: *George Kane*

Cover painting: Yaacov Agam. *Structured Gradation*, second view. 1966. Oil on aluminum, 23-1/4 x 29-7/8 inches. Collection Sylvain Perlstein, Antwerp. Polymorphic painting. Copyright 1993 ARS, N.Y./SPADEM, Paris.

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Printed in the U.S.A.

Library of Congress Catalog Card Number: 92-72391

ISBN: 0-395-64326-0

3456789-AH-96 95 94

USED BOOK
21.90

How to Study in College

To the Instructor

Time after time, students have told me that by learning a particular technique for, say, 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.

THE FIFTH EDITION

- A new "concept map" at the beginning of each chapter provides a structured, at-a-glance overview of that chapter's contents.

- Each “Have You Missed Something?” chapter quiz now includes additional multiple-choice questions and new short-answer questions to reinforce students’ understanding of key concepts.
- The new “Building Your Vocabulary Step by Step” section at the end of each chapter integrates vocabulary instruction throughout the book and lists words to learn from each chapter.
- *How to Study in College* has been streamlined throughout and carefully organized to show how its time-tested strategies and techniques apply to all aspects of learning.
- The “To the Student” introduction personalizes academic success by helping students establish their academic goals and directing students in using their schools’ resources, their own learning styles, and this textbook to achieve these goals.
- Part I, “Preparing for Academic Challenges,” lays the groundwork for effective learning with proven techniques for controlling stress, managing time, deepening concentration, and improving memory. Updated research findings support these techniques.
- Part II, “Devising a Note-Taking System,” provides a system for taking notes from readings and lectures and then mastering those notes, plus ways of using both sides of the brain to increase understanding and recall. It also helps students develop their own study systems by customizing sound learning methods to accommodate personal learning styles.
- Part III, “Succeeding at Test-Taking and Writing,” explains how to manage the anxiety that surrounds taking tests and writing papers, provides specific techniques for understanding and answering test questions, and sets up a methodology for doing research and writing. The expanded research section includes information on using libraries’ computerized indexes and catalogs to select and investigate a topic.
- The Instructor’s Resource Manual now includes six reproducible supplementary chapters that cover computers, math, science, effective speaking, foreign languages, and literature. It continues to provide additional multiple-choice questions (with answers) and short-answer questions for further study and discussion.

ACKNOWLEDGMENTS

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

My sincere thanks also go to the contributors of material in previous editions: Professors Harrison A. Geiselmann, Kenneth A. Greisen, and Jane E. Hardy, all of Cornell University; Professor William G. Moulton of Princeton University; Professor James A. Wood of the University of Texas at El Paso; and Dr. Nancy V. Wood, now Director of Study Skills and Tutorial Services, the University of Texas at El Paso, but then a graduate teaching assistant in the Cornell Reading and Study Skills Program, for certain materials she originally prepared for that program.

I am also very pleased that for the current Instructor's Resource Manual a valued friend, John Rethorst of Cornell University, has combined his new chapter on computers with the chapter previously written by my esteemed colleague Professor H. Dean Sutphin of Cornell University. Professors Mike Radis and Ron Williams of The Pennsylvania State University prepared the in-depth questions for further study and discussion that appeared in the Instructor's Manual for the Fourth Edition, and Professor Carol Kanar of Valencia Community College assisted with the updating and revision of Chapter 1 of that edition. I thank them all for their valuable assistance.

Now for a very special acknowledgment: I am grateful to my friend Ross James Quirie Owens, whose experience as a writer, newspaper editor, director, and cinematographer prepared him to take full charge in revising, editing, and improving this book. His talents are particularly apparent in the mini-overviews and concept maps at the beginning of each chapter and in the quizzes at the end of each chapter as well as in all the quizzes and questions in the Instructor's Resource Manual.

I would also like to thank the reviewers of the text and manuscript for their many fine suggestions:

A. Cheryl Curtis	<i>University of Hartford</i>
Ceil Fillenworth	<i>St. Cloud State University</i>
Stephen D. Johnston	<i>Lane Community College</i>
Richard E. Lake	<i>St. Louis Community College at Florrisant Valley</i>
Lorita Manning	<i>Baylor University</i>
Kathryn E. Moore	<i>St. Louis Community College, Meramec</i>
C. David Moorhead	<i>Long Beach City College</i>
Thomas Musgrave	<i>Weber State University</i>
Jayne Nightingale	<i>Rhode Island College</i>
Jane Rhoads	<i>Wichita State University</i>
Sara Lee Sanderson	<i>Miami-Dade Community College</i>
Susan Steger-Farmer	<i>William Rainey Harper College</i>
Linda Wong	<i>Lane Community College</i>

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

I was recently startled by a full-page picture of a yawning baby in a CIGNA ad, which appeared in the *Wall Street Journal*. What struck me were these big, bold-faced words at the top of the page: **"ONLY 22,463 DAYS UNTIL RETIREMENT."**¹

My immediate reaction was "Oh, no! Life is not so short. We have more working days than this." I quickly punched 22,463 into my calculator and divided by 365. Sure enough, the figure confirmed the advertisement's point: "The average retirement age is now 61.5, not 65. And it's getting even lower." If you're already 18, you have only 15,163 days until retirement—and you're not through college yet!

But don't race breathlessly through your days. Rather, make the most of them by planning for college, for work, for fun, and for retirement. Plan so that you have control over your life. It is all up to you.

SHAPING YOUR FUTURE THROUGH GOALS

You can begin shaping your life now by setting definite, realistic goals for your college career and by mapping out plans to reach them. Your long-term academic goals may, for instance, be to choose a field of study or a specific career, to become proficient in a particular skill or set of skills, to gain more control over your time, or to learn how to work effectively despite stress. These are personal aspirations that you alone can determine. Of course, as you think about them and gather information to help you set them, you can consult with your academic advisor, other school or outside counselors, books, people who have achieved similar goals, and so forth. But *you* are the person who sets your goals, and *you* are the one who achieves them.

Just thinking about your goals is not enough, however. In the words of psychologist and philosopher William James, thinking alone "is an impression gone to waste. It is physiologically incomplete. It leaves no fruits behind." So complete the process by writing. Use the Shaping Your Future sheet (Figure 1) to begin putting your long-term academic goals down on paper.

¹Reprinted by permission of CIGNA.

1	2
<p>My Goal</p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	<p>Steps Leading to My Goal</p> <p>1. _____</p> <p>2. _____</p> <p>3. _____</p> <p>4. _____</p> <p>5. _____</p> <p>6. _____</p> <p>7. _____</p>
3	4
<p>Positive Factors</p> <p>1. _____</p> <p>2. _____</p> <p>3. _____</p> <p>4. _____</p> <p>5. _____</p> <p>6. _____</p> <p>7. _____</p>	<p>Obstacles</p> <p>1. _____</p> <p>2. _____</p> <p>3. _____</p> <p>4. _____</p> <p>5. _____</p> <p>6. _____</p> <p>7. _____</p>

FIGURE 1 Shaping Your Future

Step 1. On a clean sheet of paper, brainstorm about your goals. Jot down possible goals and words about them that come to mind, and do so quickly and freely. Use brainstorming as an opportunity to explore any aspects of any goals you choose. Do not stop writing to correct your spelling, polish a phrase, reorganize your notes, or analyze a thought. Just keep going until you've jotted down all that you can think of about your possible goals. Now look over your notes and group together similar items. Formulate each group into a goal by writ-

ing a summarizing sentence that states the main idea of each group. Select any one of these goals, and write it in block 1 of Figure 1.

Step 2. On a separate sheet of paper, list in chronological order the steps you'll need to take to reach one of your goals. Transfer this list to block 2.

Step 3. On another sheet, jot down those academic and personal strengths that will help you achieve this goal. List them in block 3.

Step 4. Identify any academic weaknesses (such as difficulty with writing papers) or personal obstacles (such as financial, family, or health problems) that you will have to overcome to reach this goal, and list them in block 4. Repeat steps 2–4 for each goal you wrote in step 1.

With the completed Shaping Your Future sheets in hand, expand your resources. Talk with your academic advisor or with a counselor in your school's career center. Don't underestimate the value of discussing your goals and your plans for achieving them. Get as much feedback as you can. Then, if necessary, modify your goals and plans into realistic, attainable maps for your future.

You can also develop plans to achieve short-term goals such as completing textbook assignments. After writing out his academic goals, one college student enthusiastically said, "I now do almost everything in terms of goals, even my textbook assignments. I feel I'm in control of every day."

He then gave me a copy of a card that keeps him focused on his assignments (see Figure 2). "Using this card," he explained, "I waste no time. I comprehend better and remember more."

With this format as a guide, you can design your own Reading Assignment Card. Try it, refine it if necessary, and then reproduce the final version so you'll have a ready stack.

TAKING ACTION

Among the saddest words in life are "It might have been." If you take no action, your goals and plans will amount to nothing. For instance, let's say your short-term goal is to excel in your biology course. Anticipating that you may have trouble with some of the terms and concepts, you've decided to get help from a tutor. The biology department identifies the tutor for you, and now it's up to you to contact him or her. If you procrastinate

Date	_____
Book	_____
Starting page	_____
Ending page	_____
No. of pages	_____
Time allotment	_____
Time started	_____
Time to finish	_____
Time finished	_____
Page reached	_____
Goal achieved	yes — no
Reason (if no)	_____

No. min. worked	_____
No. of pages read	_____
Atmosphere:	intrptns no intrptns
Work location	_____

FIGURE 2 Reading Assignment Card

here, all the thought, time and effort you put into your plan will have been wasted. Taking action simply means taking those steps necessary to complete your plan.

Let me pass on to you the technique that I use to push *myself* into immediate action. I whisper to myself, "Do it now. Life is not a rehearsal!"

If you muster up the self-discipline needed to take advantage of the resources that your college makes available, and if you make an effort to un-

derstand your learning style and develop your study skills, then you will have taken intelligent, decisive action in the pursuit of your goals.

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. In the catalog you will find courses listed by department or by subject area and descriptions of course content. This information can help you plan your schedule of future courses. Whenever you have a problem, check the catalog for a listing that may help you.

Student Handbook. The student handbook provides information on 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. It's a good idea to read the student handbook to familiarize yourself with your school's codes and policies.

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. This office stores all your records and at the end of each term issues your grade report.

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 submit-

ting 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 that keeps you informed about campus life 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 for increasingly demanding college courses.

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.

Undergraduate Athletics Office. A listing of the college's athletic programs and events is available in the undergraduate athletics office. This is the office to visit if you are interested in participating in intramural or varsity sports or if you want to know how to get tickets for the next college sporting event.

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.

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.
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 _____.

Now that you've identified the characteristics of your style, take a couple of minutes to look at your study skills. The following list presents some statements students typically make about various aspects of studying. Circle the response in each sentence that best describes you and your study habits. Then use the page numbers that follow each item for additional self-study.

Study Skills Self-Assessment

1. Daily pressures do/don't make it difficult for me to relax and work efficiently. (pp. 3–32)
2. I can/can't find enough time in the week for all that I need to accomplish. (pp. 35–56)
3. I have/don't have difficulty concentrating. (pp. 59–73)
4. I do/don't have trouble remembering what I've learned. (pp. 75–102)
5. I do/don't have a system for taking notes. (pp. 107–121)
6. I recognize/don't recognize the kind of information that I should be jotting down in my notes. (pp. 123–143)

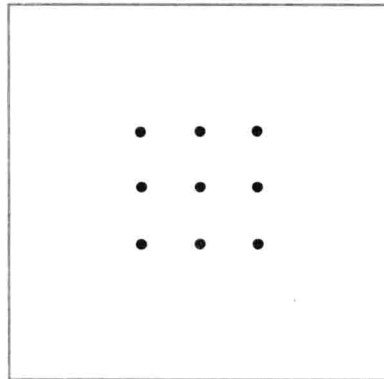


FIGURE 3 The Nine-Dot Problem

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 xxvi.

7. I do/do not find my notes useful after I've taken them. (pp. 145–162)
8. Pictures, graphs, and diagrams help/don't help my understanding of what I've read or heard. (pp. 165–185)
9. I usually do/don't become anxious about taking tests. (pp. 189–208)
10. I could/could not use some improvement in my test-taking skills. (pp. 213–234)
11. I do/don't feel intimidated by essay questions. (pp. 239–256)
12. I have/don't have difficulty writing research papers. (pp. 259–285)
13. Learning new vocabulary is/isn't a problem for me. ("Building Your Vocabulary Step by Step" sections)

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 3. 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?"

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 reading and applying the techniques presented here, you will quickly begin to improve as a student, making your college experience a rich and rewarding one.

You will find many ideas, tips, techniques, and systems in this book, but do not try to use them all. Instead, try those you believe will help you the most. To discover the ideas that best suit you, follow this procedure. First, make sure that you comprehend the idea *and* that you also see the reason or principle behind it. Second, consider how the idea may fit in with the way you study and learn. Third, give the idea a test run to see if it

