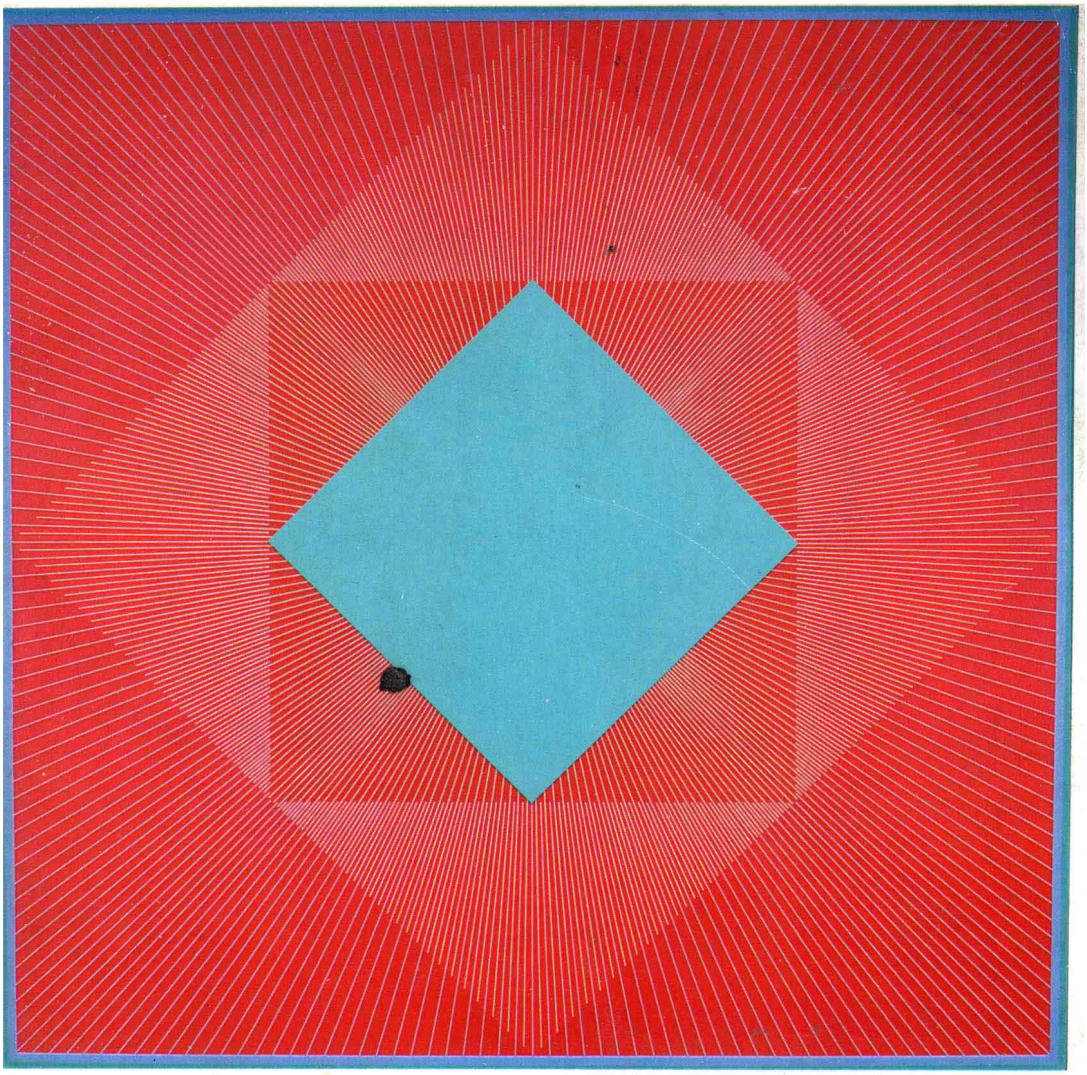

HOW TO STUDY IN COLLEGE

Third Edition | *Walter Pauk*

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HOW TO STUDY IN COLLEGE

Preface

TO THE THIRD EDITION

Over thirty years' experience with helping students develop better study skills has convinced me that any student who wants to be helped can be helped. Time and again students have told me that by learning a particular technique for taking notes, remembering what they read, reviewing for an examination, or attacking a difficult subject, they have achieved a major breakthrough. Moreover, it often happens that improvement in one or two study techniques helps a student to solve a range of other study problems.

The Approach of This Text

How to Study in College is based firmly on the belief that students are not primarily interested in theory, and most of them have little patience

with solely inspirational talk. What they want is straightforward, practical instruction on how to tackle and overcome their special difficulties. They want something they can readily understand and apply, and something that works. This book stresses practical study techniques which, in my experience with thousands of students at universities and two-year colleges, have been found to work.

These techniques are the product of extensive trial and experiment based on accepted educational and learning theory. Theory is never presented, however, without specific instruction on how to apply it. After all, the person who needs penicillin is seldom cured by learning the history of antibiotics. The chief method of this book, then, is to translate theory and the findings of research into tools which students can grasp and use. In making the book concrete, I have relied heavily on visual examples. Students are shown economical ways of scheduling their time. They are shown facsimiles of lecture notes and the relative advantages and disadvantages of various methods of notetaking. They are shown how topic sentences and transitional expressions summarize an idea and relate the parts of a discussion. They are shown how and how not to mark the books they study, to take notes on their reading, and to answer questions on an examination. They thus learn by vivid example to apply the principles to which research in learning and education has led us.

It is crucial, of course, that students learn rather than merely memorize—that they retain their knowledge so that it provides a solid foundation for more. For this reason I am wholeheartedly against techniques designed solely to help students memorize information the night before a test. Such techniques can fill the mind with "knowledge" that melts away after an examination and leaves everything to be done over again. Real learning results from persistent, careful study, and real learning lasts.

Finally, no textbook, no matter how up-to-date, is truly useful if it is written in a style that is boring, confusing, or excessively difficult to read. I have therefore written and edited with the aim of achieving a conversational tone, to make reading seem like a person-to-person chat.

What's New in the Third Edition!

This third edition of *How To Study in College* is the product of extensive revision and updating. Research into how we learn continues to uncover fascinating new possibilities for enhancing the tasks of students and teachers alike. The results and implications of recent research are incorporated in every chapter of the third edition. Four new chapters on tests and examinations offer students concrete suggestions on how to prepare for and take six different types of tests. A new chapter covers an increas-

ingly important facet of the educational process, "Understanding Visual Materials." I explore five different study systems designed to help students get the most out of their textbooks, and ten new systems for improving reading skills.

The third edition also explains mnemonic devices that can aid students in remembering important information. In addition, discussion of how to listen better was developed to help students get more out of lectures and class discussions.

Every chapter has been augmented by three valuable new features. First, each chapter begins with a list of objectives, so that students can see at the outset what skills and ideas the chapter will present. Second, chapter summaries, presented in a question-answer format, are an aid to reviewing. Third, further reinforcement of chapter material is provided by end-of-chapter quizzes entitled "Have You Missed Something?"

Acknowledgments

Warm and sincere words of thanks must go to those who are deeply and permanently linked to this book: Prof. Marvin D. Glock for giving me the opportunity to enter the field of reading and study skills as a graduate teaching assistant; Ian D. Elliot, now managing editor for a large publishing house, but then an editor for fraternity publications, who helped and advised me in transforming the original mimeographed version into a more readable first edition; 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 recall with gratitude the late Henry F. Thoma, the Houghton Mifflin editor who first saw the tiny spark of possibility in the mimeographed version and who encouraged, advised, assisted, and guided me in developing the scope and format of the first edition. I am deeply grieved that during the preparation of this edition he passed away.

My sincere appreciation and thanks also go to those who contributed chapters to this and previous editions: Prof. Kenneth Greisen of Cornell University for his chapter on studying science; Prof. James A. Wood of the University of Texas at El Paso for his chapter on speaking effectively; and Jane E. Hardy of Cornell University for her chapter on writing good papers. The material of these fine chapters has been updated and reworked in the third edition.

I am deeply indebted to two old standbys whose chapters are now included in the Instructor's Manual: Prof. William G. Moulton of Princeton University for his chapter on studying a foreign language; and Prof. Har-

rison A. Geiselmann of Cornell University for his chapter on studying mathematics.

The latest addition to the acknowledgment list is Ross James Quirie Owens, whose experience as a writer, director, and cinematographer prepared him to put some final touches on the manuscript, but especially on the mini-overviews that precede each chapter and the quizzes that end each chapter. I'm grateful to him for his expertise and friendship.

I must also thank the following reviewers of the text and manuscript for their many 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 to others.

W.P.

To the Student

No two students study exactly alike. A technique that fits your style of learning may not fit your friend's. Just as your personality differs from your friend's, so do your individual strengths and weaknesses.

In this serious business of studying and learning, you have to observe yourself as you study to notice what you do best and when. Such information about yourself is essential if you are to use your time and energies wisely.

What's Your Style?

Here are some examples of what I mean by styles of studying and learning.

Reading, listening, and doing

Some students learn best by *reading*, others by *listening*, and still others by *doing* things. Of course, you must do all three to learn in college, but each individual does one more effectively than the others.

If *doing* things is your strong suit, then you should know that a warm-up period is generally needed before you really get into your subject. But once you get going and concentration is high, you can keep studying for a long stretch without a break. So, when you schedule a long assignment, allot yourself a big block of time to take advantage of your momentum.

The physically active student

If you find it hard to study sitting inactively most of the time, especially when reading a textbook, then try pacing back and forth in your room, stopping only to underline and make notes. During your restless periods, do things that demand activity, such as filling gaps in your lecture notes, looking up definitions of words you've written down, working mathematical problems, filling in the cue column in your lecture notes, underlining textbooks, and so forth.

"I work well under pressure."

What this probably means is that you somehow get the job done; that is, you grind out a paper or pass an exam by working far into the night. The chances are great, however, that the quality of learning will be poor, and what you learn will be forgotten rapidly. There's also the danger of creating a health problem. Working under pressure pushes up your blood pressure, and if blood pressure is pushed up too often, *it will stay there.*

"I work poorly under pressure."

If you do, simply recognize that that's the way you are, and plan so that you avoid pressure. An early start on all your assignments will result in quality learning and in more permanent retention. Those are great rewards.

Sprinters

If you are a sprinter, you can get a lot of

studying done in a few hours of intense work; but after those few hours, the amount of work accomplished drops off. So plan to first study the subjects that require high concentration and comprehension, and leave active work, such as doing math problems, for last.

Long-distance runners

If you are a marathon runner, you can work at a steady pace over many hours and still be productive. Nevertheless, you should do the hardest subjects first, because you too are bound to show some signs of slowing down as you continue to work hour after hour. Save the easiest for last.

The efficient, effective student (and others)

Alex Main of the University of Strathclyde, Scotland, noted that the effective student

Has a regular study schedule
Works to a timetable
Usually works at the same times each day
Works mostly in a regular study place
Works for short periods with frequent rest breaks
Reviews notes soon after a lecture
Does not leave work to the last minute
Does not get easily distracted
Does not need exams for motivation[1]

However, by questioning new undergraduate students, Main found the following:

1. One-third of all students tend to put off work and leave too much for the last minute.
2. Almost half of them get easily distracted when studying.
3. A similar proportion lose interest when things get too difficult.
4. More than a third need exams to make them study.
5. Forty percent of all students have no regular work schedule.[2]

[1]Alex Main, *Encouraging Effective Learning* (Edinburgh: Scottish Academic Press, 1980), p. 2.

[2]Main, *Encouraging Effective Learning*, p. 2.

Make Your Own Study-Skills Packet

In this book you will find many ideas, tips, and systems for becoming a better learner, but no one should try to follow them all. Instead, select and try those you believe will do you the most good. To make a wise selection, follow this procedure. First, make sure that you not only comprehend the idea, but also see the reason or principle behind the idea. Second, consider how the idea would fit in with the way you do things. Third, give each promising idea a try to see if it works before adopting it. In other words, look upon this book as a kit from which you can select the pieces and make your own individual study-skills packet, to fit your particular needs and personality. But realize that, to make a new packet, you must discard some of your present ways of doing things. Discarding is hard, so you might want to remember the following epigram by Kirk M. Sorensen: "When the horse is dead, get off."

References to Research

There are a number of references to research in this book. They should not, however, lead you to conclude that the writing is cold and scientific; nor should you conclude that the ideas are written in hard-to-read scientific language. As you will find, the writing is informal, instructional, and as straightforward as possible. There are, however, two reasons why I included references in this book: First, to give credit to the people who originally put forth the data and ideas; and second, to lend scientific authority to some of the statements that I make.

Let me briefly expand on this second reason. We sometimes get tired of hearing the freely given advice of parents and teachers—much of which we assume was okay twenty years ago but doesn't apply now. Since I didn't want my ideas placed in that category, I dug deeply into research to back up my claims. For example, I believe so strongly in the value of a good breakfast to start each day that I sought out the most reputable reference I could find, the U.S. Department of Agriculture. You will notice that brand names of foods are not mentioned in my discussion of nutrition; nor are the researchers part of any commercial corporation. Consequently, the research results that I cite can be taken at face value.

Reading the Chapters

On the title page of each chapter, you'll find a mini-overview, almost like a menu. Read it through, before you read the chapter, to whet your appetite for the content of the chapter. Then read the chapter straight

through thoughtfully, and read the chapter summary carefully. Now, with the understanding you've gained from the summary, go back and re-read any part of the chapter that you're especially interested in. Make notes on any techniques or ideas that you would like to try or remember.

End-of-Chapter Questions

These questions were designed to *teach,* not to *test;* you'll find no trick questions and no traps to lead you to an incorrect answer. Take each question at its face value, and answer it to the best of your ability.

Look upon each incorrect answer as a suggestion that you re-read the pertinent portion of the chapter. By re-reading and then rethinking the question and answer, you will greatly strengthen your understanding of the entire concept—which, after all, is the reason you are reading this book or taking the course in which this book is used.

A Final Word

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

Contents