WILLIAM H. ARMSTRONG

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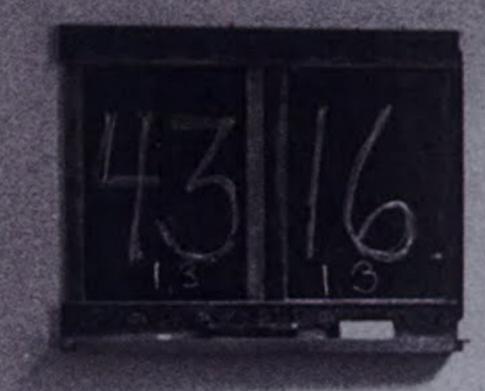
STUDY

AUTHOR OF "SOUNDER"

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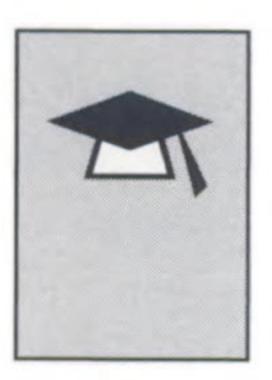
WORK





Study Is Hard Work

SECOND EDITION



WILLIAM H. ARMSTRONG

Winner of the National School Bell Award for distinguished interpretation in the field of education and author of the Newbery Award-winning book, Sounder



DAVID R. GODINE

Publisher · Boston

To my grandchildren Chris, Katy, Rebecca

&

To all my students

present and past

who make, and have made,

teaching an exciting

and glorious experience

Study Is Hard Work, Second Edition

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Foreword to the First Edition

On two matters college teachers, no more given to agreeing with each other than members of most professional groups, regularly express remarkable unanimity of opinion. College students, they agree, are commonly deficient in ability to express themselves well in English and, quite as commonly, deficient in effective habits of work. In some measure, the college teachers' complaints may be dismissed as the traditional dissatisfaction of the old with the performance of the young. Yet college teachers are not all by nature quick to complain; they welcome skill in expression and diligence in study eagerly enough when they find it and presumably would be glad to find it everywhere. Since they do complain, therefore, their complaints would seem to have some foundation in fact. Often teachers in the schools reply, and quite correctly, that some jobs are never done, learning to write well and to study efficiently among them. And some insist that learning to write and, even more, learning to study are always specific, never general, skills; that is, that successful writing is writing for a purpose, and successful study, study that has a particular end in view. From this postulate they argue that the college must teach writing and skills of study quite as much as the school. In short, to each its own perplexities and solutions.

Like many pedagogical arguments, especially those centering on the development of skills, this one often ends in the slough of de-

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spond. Yet in the daily round of life, we all know well enough that we do develop general skills and that we do apply them to particulars much in the way our body absorbs food and distributes it in various chemical forms to all our members. It is manifestly impossible to learn skills anew for each situation we meet; we count ourselves well-educated when we have sufficient command of our faculties to adapt them effectively to new situations as they arise. Such command implies both the development of mental habits and an orientation of the will toward exercise of the mind. It is to that development and that orientation that Mr. Armstrong's book is directed.

This little book is in many ways an unusual one. To begin with, it has a bluntness far from common in how-to books of any time or clime. Its delightfully perverse title is neither misnomer nor joke. The truth is, and always has been, that formal education (another name for accelerated learning) is hard. "Painful" is the word Aristotle used for it, a term Mr. Armstrong may have in mind when he writes "education without sore muscles is not worth much." However suspiciously students may look on such a statement as representing the sublimated sadism of their elders, there is solid ground for the observation. Learning something new means altering our stability of the moment. The greater the strangeness or difficulty of the new information, the greater the strain put on our present, and comfortable, state of mind. If we must hurry to assimilate the new—as indeed we must—then we suffer not only from reluctance to disturb our equanimity but from the process of ingestion as well. Studying is hard, and the less students and teachers pretend that it is not, the better.

Mr. Armstrong is not a psychologist, nor does he made any pretense of being one. He is a schoolmaster in the old and half-forgotten sense of that admirable epithet. He obviously knows students, and he obviously knows how to deal with them. His theorizing is of the kind that the young understand and, even as they resist, respect. It deals not with stimulus-response data but with the deep instinct of young people for self-realization, for commitment to an ideal. In fact, for

FOREWORD TO THE FIRST EDITION / ix

Mr. Armstrong studying is a moral matter first of all, a matter of governing the will—of accepting a right purpose and of concentrating one's energies toward its achievement.

Today it is a bold man who dares to say that students have a "basic obligation" to work whether or not they are what is called "interested" in the subject-matter. Mr. Armstrong says just that and, in so doing, touches the matter of learning at its vital center. Schooling makes no sense at all unless it assumes that students have a basic obligation to study; and if they recognize that obligation, there need seldom be much need to worry about interest, for interest is the fruit quite as much as it is the stimulus of study.

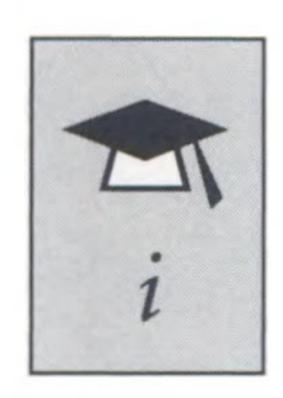
Archimedes is supposed to have said that, given a lever and a place to stand, he could lift the world. In one way or another, all men spend much of their energy looking for some such external leverage by which to alter or lighten their burdens; and all, like Archimedes, are bound to be disappointed. The job has to be done, in the degree that it can be done at all, from inside. That is the governing principle of Mr. Armstrong's book: begin with an honest facing of yourself, take honest measure of the work to be done, then go systematically to work.

The student who takes to heart the injunctions and advice of this book should not expect to find all doors magically opening before him. Studying *is* hard and *remains* hard; but learning to study well makes the effort pleasant, just as learning to ski well, though skiing continues to tire the muscles and strain the nerves, makes both side-stepping up a slope and schussing downhill enjoyable experiences. The students who have learned to enjoy study because they know how to do it well are prepared in the best sense of all for work in college and for life. Whatever helps them to learn how to study well is, therefore, an important contribution to their liberal education.

HAROLD C. MARTIN
former Director of General Education
Harvard University

As a busily growing animal, I am scatterbrained and entirely lacking in mental application. Having no desire at present to expend my precious energies upon the pursuit of knowledge, I shall not make the slightest attempt to assist you in your attempts to impart it. If you can capture my unwilling attention and goad me by stern measures into the requisite activity, I shall dislike you intensely, but I shall respect you. If you fail, I shall regard you with the contempt you deserve, and probably do my best, in a jolly, high-spirited way, to make your life a hell upon earth. And what could be fairer than that?

IAN HAY, The House Master



Introduction

Before the gates of excellence, the high gods have placed sweat.

– Work and Days, HESIOD



If we do only what is required of us we are slaves, the moment we do more we are free. - CICERO

Those who seek miracles or panaceas to replace work should stop here. The basic skills of study cannot be taught. They can only be made available and demonstrated. They can be learned, and the degree to which they are learned and successfully used depends entirely upon the intellectual avidity and motivation of the learner.

How to study is one of the most important things you can learn while you are still young and your mind is still pliable. Learning how to study involves putting away the habits and ideas that have made study unpleasant and burdensome, and taking on habits and ideas that make study a really constructive and dedicated force aimed at the ultimate fulfillment of the talents which separate man from "the beasts of the field." The importance of learning how to study is not a seasonal topic that can be forgotten when you have finished school and college. Now the school lessons require study. After school you

year is 180 days. The work time of the school day averages six hours. In eight years you have spent 8640 hours. It must be assumed that an average of at least one hour's outside study was required each day, thus 1440 hours. The total number equals 10,080. How many hours were spent in the development of habits and practices that constitute good study habits?

If you had started with a saw, hammer, square, and level 10,080 hours ago, would you not be a master builder now? You would long ago have learned how to use your tools efficiently. You would have built three complete houses in 10,080 hours. Working alone, it requires between 3000 and 4000 hours to build the average size house. Have you given any thought to using successfully the tools of study?

The amount of school workday and study time spent in secondary school comprises about 6000 hours. There are four school years of 180 days each. The school workday is six hours. A minimum of at least two hours is spent in study over and above the workday, 4320 hours are spent in school, and 1440 hours in outside study, making a total of 5760 hours—or approximately 6000 hours. How many of these hours are spent trying to understand and realize the value of the tools of study?

The regular college course of four years requires about 6000 hours of study time. The working year is about 180 days. About three hours per day are spent in class. A minimum of five hours a day is needed for outside study. Therefore, 2160 hours are spent in the classroom, and a minimum of 3600 hours of outside study. Hence, the 6000 hours. What percentage of this time is spent developing efficient study habits?

What then? When you finish college you will have used up about one-third of your life; you will have been studying about 22,000 hours. Is it over? No. You can only hope that you have had sufficient training for the studying which you, after college, commence in earnest. Beware of the commencement speaker who lauds you for the goal you have reached. You really have reached only the starting post.

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From this point on your success will be measured largely by your ability to study.

The purpose of this book is to help you study more efficiently. It will aim to acquaint you with the skills and experiences that will make your study more profitable. First, the basic requirements that you must contribute will be surveyed. Secondly, the tools of the business of study will be explained with emphasis upon the value of those tools. Thirdly, the study skills will be examined, and the habits and practices for the accomplishment of these habits will be presented. This book will have no value for you now, or ever, unless you are willing to take the time to put into practice the skills and habits which will make your study a really constructive and dedicated force, aimed at the ultimate fulfillment of the talents that have been given you.

The material of this book has been reduced to the simplest possible form. Some chapters have been reduced to a minimum of rules and suggestions. This is in no degree an assurance that study will no longer be work. It is not a sinecure for the rest of your school experience. Learning through study will still be hard work. The definition of study will remain what it has always been—the determined, purposeful processes by means of which we learn. Problems in mathematics will still be hard, Latin vocabularies must still be written over and over again to be learned. If you are willing to improve your desire to learn and your study habits, you will at least come to understand what knowledge is; how difficult it is to attain, how much industry, thoroughness, precision, and persistence it demands if you are to have even a distant glimpse of it.



Learning to Listen

It is paradoxical that listening is the easiest way to learn but the hardest study skill to master.



If you love to listen you will gain knowledge, and if you incline your ear you will become wise. - SIRACH

INTEREST MEASUREMENT TEST

- 1. Do you hear the names of people who are introduced to you?
- 2. Are you waiting to listen when your teacher begins to speak or do you miss the beginning remarks?
- 3. Are you thinking of what you are going to say next while someone is speaking to you?
- 4. Are you addicted to the fatal belief that you can listen to two things at once?
- 5. Have you ever consciously tested yourself to see how much you can remember of what is said to you?

If the answer to each of these questions is an honest "No," you need not despair. You can console yourself that you are with the great ma-

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jority. You can also resolve to train yourself to listen and be successful in the training.

While listening is the easiest and quickest of all the ways to learn, learning to listen—and to use listening as one of the most effective of all the learning processes—is the hardest of all the learning processes to master. Your teachers have been able to help you learn to read and to think, but it is almost impossible for the teacher to give more than awareness-aid to the process of listening. It must be almost wholly self-taught. It was not emphasized in your early training; it is the least susceptible of all the learning processes to discipline; and it is never accomplished except by active and continued practice. Few ever achieve it, but those who do are counted among the students who learn the most, and the persons in society most desirable to know.

Now to learn to think while being taught presupposes the other difficult art of paying attention. Nothing is more rare: listening seems to be the hardest thing in the world and misunderstanding the easiest, for we tend to hear what we think we are going to hear, and too often we make it so. In a lifetime one is lucky to meet six or seven people who know how to attend: the rest, some of whom believe themselves well-bred and highly educated, have for the most part fidgety ears; their span of attention is as short as the mating of a fly. They seem afraid to lend their mind to another's thought, as if it would come back to them bruised and bent. This fear is of course fatal to sociability, and Lord Chesterfield was right when he wrote his son that the power of attention was the mark of a civilized man. The baby cannot attend, the savage and the boor will not. It is the boorishness of inattention that makes pleasant discussion turn into stupid repetitive argument, and that doubles the errors and mishaps of daily life.1

¹Jacques Barzun, Teacher in America, Little, Brown and Company, 1945, p. 35.

Before books and printing, the primary element in acquiring knowledge was listening. A "lecture" originally meant a "reading" from some precious manuscript. The reader read slowly and stopped to explain difficult passages to his listeners. The process has changed; reading is no doubt the primary element in acquiring knowledge, but listening remains the second most important element.

Why is listening, doubtless competing with the proper use of time for first among good study methods, the most difficult of the learning processes? The practices of seeing (reading), writing, and thinking are exercised within the person. But listening takes on the complexity of the listener having to coordinate their mental powers with an outside force—the person or thing to which the listener is listening. This demands the discipline of subjecting the mind of the listener to that of the speaker.

The second problem in learning to listen arises from lack of associated control. When you learn to read, your eyes control the speed with which you read. When you write there is actual physical control in your hand. In thinking, the analysis of thought travels at exactly the speed capacity of your mind. But when you begin to train yourself to be a good listener, you are faced with a difficulty not unlike that of trying to drive a car without brakes. You can think four times as fast as the average teacher can speak.

Only by demanding of yourself the most unswerving concentration and discipline can you hold your mind on the track of the speaker. This can be accomplished if the listener uses the free time to think around the topic—"listening between the lines" as it is sometimes called. It consists of anticipating the teacher's next point, summarizing what has been said, questioning in silence the accuracy or importance of what is being taught, putting the teacher's thoughts into one's own words, and trying to discern the test or examination questions which will be formed from this material. If you can train yourself to do this you will: (1) save yourself much precious time by not having to read what has already been taught; and (2) you can give

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tively that you will be able to find the important parts of information. Sometimes a clue can be found in repeated phrases, such as: "The important point," we must remember," etc. Other teachers almost blue-print the information for you. They enumerate: One, two, three, etc., they outline or diagram on the blackboard as they talk. Never affront them by asking, "Do you want us to remember this?" You can be sure that they are making the information clear for just that reason.

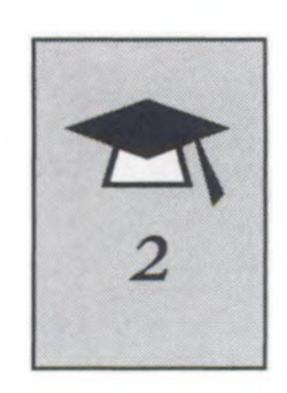
- 5. Check every tendency toward mind-wandering. The brain, the ear, the eye must be working together if you are to hear what is being said. How many times have you asked a question in class, only to be humiliated by finding that the teacher had just finished an explanation of the same. Mind-wandering can be checked by taking notes. Writing is one of the best ways to train yourself to listen. In order to write you force yourself to listen.
- Listen critically, thoughtfully, and understandingly. If your listening
 can do the same. Test each statement as you hear it. If you do not understand a point, ask for an explanation then or after the class.

SUGGESTIONS FOR BETTER LISTENING IN THE LECTURE HALL

- Don't enter the hall and slouch in a back seat. How would you feel if you were the speaker? By that act you are insulting the speaker—the very act says for you, "I am here. I will listen half-heartedly, if at all; just try to teach me anything." Always fill the lecture room from the front; take the front seat if possible.
- 2. Put yourself in the speaker's place. Perhaps for every minute the speaker talks, he has spent three hours in preparation. Would you like to see such effort on your part wasted?
- Respect is essential. Do nothing to distract the speaker. Leave your knitting at home and dispose of your chewing gum outside the door.
- 4. Save your questions until the end of the lecture, unless the speaker asks you to speak up if you wish a point made clear.
- 5. Remember that you can always learn. Never approach a classroom with the feeling that the speaker cannot teach you.

REVIEW QUESTIONS

- 1. According to Jacques Barzun, how many people are you likely to meet in your lifetime who know how to listen?
- 2. Explain why listening is the easiest and quickest way to learn.
- Explain the two conditions which make listening the most difficult of all the learning processes to master.
- 4. Listening improves the whole of classroom attributes; explain.
- State briefly the five suggestions for improving your ability to listen in the class.



The Desire to Learn

Time is the most limited blessing that we have on earth.



Books help us to find meaning, if not answers, to our eternal questions: Who am I? Where am I going?



The teacher's influence reaches eternity, no one ever knows where it ends. - HENRY ADAMS

INTEREST MEASUREMENT TEST

- 1. Do you believe that you really have a desire to learn, or would you, had you been left alone from birth, be totally primitive and beastlike in your thoughts and feelings?
- 2. Do you believe that circumstance and environment can prevent a person from learning if the desire is strong enough?
- 3. Do you want an education enough that you would work and pay for it yourself?
- 4. Why do you want an education?
- 5. What will your education really be when you get it?

Outside the wind swept through the giant trees that dwarfed the cabin. Inside the cabin a little figure lay on the boards of the loft. He listened. Below him voices spoke of strange things: places he had not seen; things he did not know about; the savage toll of the wilderness and the struggle those below were enduring. What was happening? Years later one of the greatest Americans we have yet produced was to write:

I can remember going to my little bedroom after hearing the neighbors talk of an evening with my father, and spending no small part of the night walking up and down and trying to make out what was the exact meaning of their, to me, dark sayings. I could not sleep, though I often tried to, when I got on such a hunt after an idea, until I had caught it; and when I thought I had got it, I was not satisfied until I had repeated it over and over, until I had put it into language plain enough, as I thought, for any boy I knew to comprehend.¹

Of all the incidents in Lincoln's life, this has always seemed to me the most remarkable. That a boy of his years should have felt so keenly the burden of the inexpressible, and should have spent sleepless hours in attempting to free himself from this burden, seems at first glance to remove Lincoln from the class of normal men. We think of him as peculiar, as apart from others, as not so representative as he would have been had he gone straight to bed and not bothered himself about putting into definite words the thoughts that were busy in his brain.²

But, explain it as we may, here was the desire for expression in clear words. Here was the desire to learn. Lincoln had it to a greater degree than most mortals. But we all have it. We are often not conscious of it. The desire to learn enabled Lincoln to say in many speeches and letters what others were beginning to feel but could not express. He became one of the great masters of English prose, al-

¹John G. Nicolay and John M. Hay (eds.), The Collected Writings of Abraham Lincoln, Appleton-Century-Crofts, 1894, IV, p. 61.

²The author is indebted to the late Dr. C. Alphonso Smith, a great teacher, for the material in this paragraph.

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though he had no one to teach him how to study and very little material with which to study. He became a leader of men because he interpreted them to themselves. He gave back as rain what he received as mist. He received his knowledge as mist, because he had so little time to learn. No one provided him with books and classes and study halls. He snatched his study periods between hours of hewing away the wilderness and fighting hunger.

A biographer of our times, reflecting upon the education of Lincoln, says:

Mastery of language may have been that ultimate factor without which he would have failed. For the self-taught man who once would have given all he owned and gone into debt for the gift of lyric utterance had touched the summits of eloquence. Yet this, like his other achievements, had not come by mere chance. Patient self-training, informed reflection, profound study of a few great works of English literature, esteem for the rhythmic beauty that may be coaxed from language, all these had endowed him with the faculty to write well and to speak well, so that at last, when profound emotions deep within him had felt the impulse of new-born nobility of purpose, they had welled forth—and would well forth once more—in imperishable words.³

If you cannot find within your heart and soul the desire to learn, then you need not expect help from without. You are the only person who can awaken the desire. Without it you will gather bits of information here and there, but you will miss the greatest of all that life offers—the advantages for your life which are with you. In all that goes into the making of your life—play, work, Latin, history, economics, law, medicine, plans, dreams—you are given the purposes and endowments for the wonderful, sometimes confusing and demanding, experience which we call life.

³Benjamin P. Thomas, Abraham Lincoln, Alfred A. Knopf, Inc., 1950, p. 500.

problems of existence are solved, and only by thought is the world which you have perceived given directed purpose and action beyond the native instincts of animals.

"Only the individual can think," wrote Dr. Albert Einstein, "and thereby create new values for society. . . . Without creative, independently thinking and judging personalities the upward development of society is as unthinkable as the development of the individual personality without the nourishing soil of the community."

Communication is the means whereby the memory of mankind is made articulate. It is, without question, the principal factor that raised us above the beasts and gave us dominion over them. The ability to communicate touches every minute of our lives—the answer to a question, whether or not you are able to sell your product—be it a new type of toothbrush or an ideal affecting the whole of mankind. By communication you receive from others and by communication you, depending upon your ability to communicate, will give, successfully or unsuccessfully, to others.

There are three basic skills in education: (1) the skill of finding what you want, (2) the skill of fixing it in your mind, and (3) the skill of organizing it for use. The ability to use the card index to find a book in the library immediately comes to mind. But you begin to practice the skill of finding what you want when you first reached through the playpen to get a ball that had rolled outside. The skill of finding what you want will develop and increase as long as you nourish it. The skill of fixing it in your mind requires the development of good study habits, habits which will drive you to expend your whole energies in training and disciplining your mind and will to the point where success from hard work becomes your greatest pleasure. In another part of this book we will go into the methods for the development of this skill. The skill of organizing for use is the golden metamorphosis of education, for by this skill knowledge is transformed into wisdom.

⁴Albert Einstein, *The World as I See It*, Philosophical Library, 1940, p. 9. Quoted by permission of the Albert Einstein estate.

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For example, from reading Ernest Hemingway's novel, For Whom the Bell Tolls, you learn that no man is an island unto himself, and that when one man dies a little bit of each of us dies. This is information (knowledge). It is transformed into wisdom when we apply it to our own lives, which in this case would mean ceasing to think of life in terms of our own selfish interests, but broadening our outlook to include our fellowmen. Therefore, it becomes very plain that without the development of this skill in education, the first two have little meaning.

The three basic tools of education are: (1) time, (2) books, and (3) teachers. Time is the most limited blessing that we have on earth. Time is one of the great responsibilities that life places before us. In life you will meet few people, indeed, who have learned the value of time. People fail to finish allotted tasks; they are late for appointments, meetings, and classes. These are the people who have developed little or no appreciation of their most limited blessing on earth.

School work and the activities connected with school make heavy demands upon your time. If you are not careful, you will find yourself unable to do the things you are particularly eager to do. School life is planned this way in order to force you to budget your time and become a master of yourself, so that you may reap the full reward of this most responsible discipline. "So teach us to number our days, that we may apply our hearts unto wisdom" (Psalms 90:12).

In school work, as in sports, business ventures, and military campaigns, it is essential to have a plan of action. The student who develops system and regularity in study habits, budgets one's time properly, and then adheres to the system and schedule has doubled the effectiveness of work and eliminated the worry and anxious anticipation from this, the most formative and important part of life. A schedule that is steadily followed soon becomes the easy and natural routine of the day. Constant repetition makes a good habit a part of the person who practices it. By following carefully the study schedule which you prepare, you can acquire that most precious of all knowl-

edge—the power to work. You must build your schedule for work (and play) upon tangible and intangible factors: What are your capabilities? What are your limitations? What are your strengths? What are your desires? What are your aims? Only you can determine the value of system and schedule, only you can build within yourself an appreciation of the value of time, only you can determine a proper method of attack, only you can achieve system and regularity, and only you can realize the reward from time properly allotted.

The second basic tool in education is books. In another part of this book a whole chapter is devoted to this important tool. A brief acquaintance here, however, seems necessary. Books are the memory of mankind. They are one of the several important things without which our race would not be what we call "human," as distinguished from what we call "animal." This tool of education, this memory of mankind, this great legacy, this lever that lifted us out of savagery, this enables us to find ourselves. Here the aims of education and its purposes for us are made clear by the hopes, aspirations, conflicts, experiences, successes, and failures of people in time and space who are one with us. In books we become a part of the great drama which we call life. Without books education would possess no articulate spirit, and our function would be survival rather than aspiration.

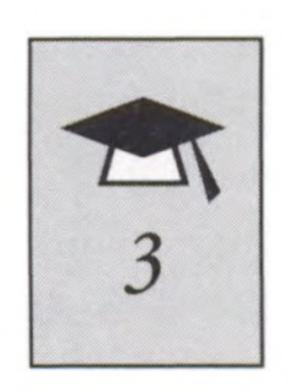
The third tool in education is teachers. In a broad sense we are all teachers; by example we are teaching those around us. Here we are concerned with the teachers who serve as your partners in the greatest endeavor and undertaking of your life—your education. How must you use this tool? You can be shown "the high, white star of Truth," and bidden to "gaze and there aspire." You must be keenly aware that a partnership exists between you and your teacher. So often, students speak of doing an assignment, writing a paper, preparing a test, for ______, the teacher. You are not doing these things for _____; you are doing them for yourself. The great enterprise is yours; the teacher is a minor partner in the enterprise. The teacher can open windows of vision and point to horizons beyond, but the

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horizons belong to you. The teacher can be "as the shadow of a mighty rock in a weary land," but only you can find shelter from sun, wind, and sand in the shadow of the mighty rock. The teacher is the guidepost for the journey, but the journey is yours. The teacher can light the lantern and put it in your hand, but you must walk into the dark.

REVIEW QUESTIONS

- 1. What are some of your natural gifts always ready to stimulate your desire to learn?
- 2. What are the three basic reasons for education?
- Explain briefly what is meant by each of the basic reasons for education.
- 4. What are the three basic skills in education? Explain the third.
- 5. What are the three basic tools of education? Which is the most limited?



Using the Tools

The present is the only thing of which a man can be deprived.

- MARCUS AURELIUS, Meditations



The most valuable result of all education is to make you do the thing you have to do, when it ought to be done, whether you like it or not. —THOMAS HUXLEY

INTEREST MEASUREMENT TEST

- 1. Have you ever followed a daily schedule for work and play which you, yourself, made?
- 2. Do you frequently turn in assignments late?
- 3. Do you consider yourself thoughtless and rude when you are late to appointments?
- 4. Do you, without looking, know the name of the author of any of your textbooks?
- 5. Do you believe that, other than your parents, the people who will most influence your life for good are your teachers?

The secret of how to study is locked up in the desire to learn. Good students are not "born students"; good students are made by constant

			Study Schedule			
Subject and Period	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	Latin II	Review Conf. Period ^b	Latin II	Latin II	Latin II	
7	Study Latin for Wed. ^a	Study History for Wed.	Review Conf. Period ^b	Study Latin for Fri.	Study Latin for Mon.	
3	Math. II	Math. II	Math. II	Conf. Period Math. II	Study Math. for Mon.	
4	English II	English II	Study Math. for Thurs.	English II	Conf. Period Review	English II
>	History II	Study Math. for Wed.	History II	History II	History II	
9	Study Math. for Tues.	Study English for Thurs.	Study History for Fri.	Study History for Mon.	Study History for Mon.	Over week end study all subjects
		A	Afternoon Activities			
Evening	Study English for Tues.	Study English Read Write themes	Study Latin for Thurs.	Study English for Sat.	Review	

never again practice the old habit of "getting under the wire." ^b The term "Conference Period" designates a period for consultation with your teachers. Some schools practice this as a definite part ^a If the habit of studying assignments well in advance is formed, you will of the day's schedule.

	Time Use Chart: Monday, September 5	
A.M.		
8-9	Arrived at school 8:30	
	Talked with friends 8:30-9	
9–10	Chemistry class	
10-11	Study period. Went to school library—read magaz	zine.
11–12	History class	
P.M.		
12-1	Lunch for half hour.	
	Cannot remember what I did until 1 р.м.	
1-2	English class	
2-3	Math. class	
3-4	3-3:30 travel home	
	3:30-4 snack, telephone, etc.	
4-5	Met friend at drugstore.	
5–6	Read English assignment 15 min. Listened to recor	ds.
6–7	Dinner	
7-8		
8–9		
9–10		
	Total hours (excepting two hours for meals)	_12
	Time in class	4
	Time studying outside of class	
	Time in social activity and recreation	
	(talking, drugstore, telephone, records, etc.)	
	Time otherwise accounted for	
	Time not accounted for	

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your waking hours for a week or two. Only by being honest and doing a sincere job of self-discovery and evaluation can you improve. Your time chart can be drawn very simply after the model on page oo.

The schedule should be made out before the week starts. It should be followed daily, weekly, monthly, until it becomes a natural part of your program. It cannot be done the first week and then forgotten—not if you expect any help from it. It will only be helpful in direct proportion to the thought and effort you put into it.

Do not expect a week's trial to establish the habit. You will want to change your schedule from time to time as emphasis on one subject or another demands more or less time. One thing is certain; a schedule will never become a real study aid unless you make it so. It can be a great aid; as Ralph Waldo Emerson wrote, "Nothing great was ever accomplished without enthusiasm." Therefore, be enthusiastic enough to work out two or three study models. Here a second model is offered. It is slightly different from the preceding one. You can probably make one much more efficient for your own needs.

Avoid being too heroic in establishing your study schedule. Your capacities vary. You will need more time for one subject than for another; this you must determine as quickly as possible and adjust accordingly. Your schedule should be rigid enough to be effective, yet flexible enough to take care of ever recurring emergencies. A well-organized schedule will not only bring order to the time element of your existence but will affect an orderly approach to all elements of your life.

Research by psychologists and efficiency experts has resulted in impressive statistics that relate the advantages of well-organized time and time-product factors. "If we have," writes Dr. B. C. Ewer, "several duties confronting us, simultaneously, it is only too likely that we shall fail to do any of them. They seem to get in each other's way. The pressure of each prevents us from giving ourselves whole-heartedly to any, or we turn in futile fashion from one to another, dropping each as soon as it is begun."²

			Time \$	Time Schedule			
Twelve Precious Hours	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
8	8–8:30 Bus to school; review one subject						
9–10	Chemistry class						
10-11	English class						
11–12	Study Chem. for Tues.	Study Chem. for Wed.	Study Chem. for Thurs.	Study for Chem. Test Fri.	Study Chem. for Mon.	Study English for Mon.	
12	Math. class					Good study time	
2-3	History class						
3-4	Home and exercise						

4-5	Recreation			Study for Chem. test			
2–6	Study Math. for Tues.	Study Math. for Wed.	Study Math. for Thurs.	Study Math. for Fri.	Study Math. for Mon.		
2–8	Study Hist. for Tues.	Study Hist. for Wed.	Study Hist. for Thurs.	Study Hist. for Fri.	Study Hist. for Mon.		
8-9	Study Eng. for Tues.	Study Eng. for Wed.	Study Eng. for Thurs.	Study Eng. for Fri.	Recreation		
9-10	Relax and read	Listen to music					
	Comments	Comments	Comments	Comments	Comments	Comments	Comments
	All work finished.				A good week. Grades up.		

what you have studied, you can neither locate nor remedy your weak points. Reciting to yourself is one of the best ways of clinching the essential information of an assignment, and it is the first step in converting information into knowledge.

Since your book is a tool and your own possession, use it as such. Read footnotes and information under illustrations. Make use of questions, study helps, and review exercises at the end of the chapter if the book provides such. Learn the time-saving purpose of the index. The textbook is a tool only if used wisely; it is a burden and obstacle if approached blindly and without interest.

Probably the greatest single source of information available to the majority of students is the textbook. The most practiced classroom activity is some type of elaboration of textbook material. It is the common ground where student and teacher meet. It is doubtless true that more student hours are spent in studying textbooks than in any other form of study. While the nature of textbooks in different subjects varies greatly, the fundamental practices for successful study are basically the same for all books.

The following suggestions have proved successful in giving students more respect for the material they are required to study, and more self-confidence in their approach and mastery of the material in the textbook. Try them on your own assignments.

RULES FOR BETTER TEXTBOOK USE

- 1. Own your book, have your name written in it (unless it is state property), and always take it to class with you.
- Know the author, and something about him or her if possible. Study
 the plan of the book, the organization of material, and the nature and
 purpose of all illustrative material.
- 3. The textbook does not have an obligation except to present the material. You have a basic obligation for accepting the book and developing interest in what it offers.
- 4. There is a best procedure for doing everything, and so it is with the

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- study of a textbook. Find the best procedure, adapt it to your specific needs, and use it.
- 5. Think of your textbook, not as so many pages, but as cumulative knowledge, arranged in logical topical steps designed to aid you in moving forward and upward, and use it to that end rather than to study a ten-page assignment day after day for no more reason than to get a passing mark. Study to learn and the mark will take care of itself.

YOU AND YOUR TEACHERS

Aside from your parents, the people who will exert the most lasting influence upon your life will be your teachers. Teaching and learning are inseparable. You and your teachers will learn together. Your teachers will learn from you exactly what your hopes and aspirations are, and to what extent you will expend yourself to realize them. You will learn from your teachers that they are selfless in their efforts to be minor partners in the greatest enterprise of your life.

You will demand much of your teachers, but what you get is your responsibility. It is not the function of the teacher to thrust something upon you which you do not want. A teacher has nothing to do with creating either the mind or the heart of the student, but can only help to develop them. A good teacher hopes and tries to make you conscious of the potentialities that are within you.

Look, listen, and learn may be called the three basic precepts for effective use of your teachers. Teachers are impressed by your class-room manners. There are good classroom manners just as there are good afternoon tea manners. The way you enter a classroom, your posture and expression while in class, the way you leave a classroom—all these little actions and impressions reveal much to your teachers.

Classroom efficiency results from attentiveness and willingness to learn. You will soon note that the good students maintain a high standard of classroom efficiency. They are aware of the value of the many hours spent in the classroom and they use these hours to the best possible advantage. Some students spend much study time

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