

#### INTRODUCTION

### Pack Your Bags: College as Intellectual Adventure Travel

The value of an education . . . is not the learning of many facts but the training of the mind.

-ALBERT EINSTEIN

### Questions to Ask as You Begin This Journey

You are about to embark on a great adventure: your college education. As with any adventure, you are likely experiencing a mix of feelings—excitement and anxiety, anticipation and reticence. You may also have many questions, including some or all of the following:

- How well has high school prepared me for college?
- Will I make new friends? Will I enjoy being a college student?
- What classes should I take, and what should I major in?
- How can I balance my schoolwork with my other time commitments, like work, social life, student organizations, and recreation?

Depending on your particular circumstances, you may have additional questions:

• How can I continue to support my family—perhaps financially or emotionally—when I am no longer at home? How will they manage without me?



<del>(</del>





- Will I be accepted by all the talented people I will meet in college? Will I feel like I belong there?
- Will my family and community at home who haven't gone to college be able to relate to the experiences I'm having and the things I'm learning?
- Will my physical disabilities or learning differences affect my ability to succeed in college? What services will be available to support me?

College will be a new experience, no matter what your background is. So I suggest you think about college as the great adventure it is. When you head to any unfamiliar place, it's a good idea to prepare. You may want to learn some key phrases in the local dialect, read something about local history, or familiarize yourself with distinctive customs and attractions. Of course, you can travel somewhere new without doing these things, but if you prepare, the trip will likely go more smoothly, and you will probably get more out of the experience.

Here, then, is my first piece of advice: *prepare for college by asking yourself* some basic questions.

## Question 1: What are my goals in going to college?

Give yourself some room to think about this question, and jot down your				
thoughts.				

Your answer to this question will depend on several things, beginning with the college you've chosen, its programs and degrees. While this book is tailored to students attending four-year baccalaureate institutions, much







of what's covered here will be relevant to students at all sorts of colleges. But first, be sure the college you've chosen is aligned with your goals and needs.

Approximately 75–80 percent of students indicate that they go to college to advance a career or to improve their earning potential, both worthy goals.¹ These students may realize that the percentage of jobs that require a college degree has risen in recent decades and is projected to continue rising.² They may also know that the lifetime earnings of college graduates are dramatically higher than those of high school graduates.³ So if you complete your degree, college is a great long-term investment, even if you take on some loans to finance your education. (Of course, you should carefully consider your personal financial circumstances before deciding to take on significant debt, especially if you are concerned that you may not successfully complete your degree.)

But you may not realize that the relationship between college and career isn't as simple as these statistics suggest. The first job you get after graduation is probably just that—your first job. Eighteen- to twenty-four-year-olds change jobs five to seven times on average during this six-year period, so if you're thinking of college as a path to that job, you may be thinking too narrowly.<sup>4</sup> You really want to focus on how your college education—which you're going to spend a lot of time and money acquiring—will still be serving you in your second, third, or fourth job after you graduate.

In addition, when most of us think about what we want to do "when we grow up," our horizons tend to be limited by the jobs we've heard of (think about a typical first grader's response to that question). But the range of potential careers out there is far greater than all the jobs you and your classmates have been exposed to, combined! Keep in mind that new kinds of jobs are created every day, especially due to rapid technological change. Not so long ago, the idea that you could become a computer scientist or a software engineer was virtually unheard of; now, these jobs and the machines they support are vital to our everyday lives. So you want to consider how college will prepare you for jobs that don't even exist yet.

Finally, employers consistently say that they look to hire people who can think creatively, analyze complex problems, write and speak effectively, and work well in groups, among other generalizable skills; job-specific skills can be learned on the job.<sup>5</sup> Here is the good news: *those key abilities and habits* 









of mind can be learned in any course of study you choose. The specific thing you study in college can enable you to land that dream job, but it doesn't necessarily determine your career. In fact, most graduates will tell you that their college major has little connection to what they're doing now.

So yes, a college degree, especially from a four-year institution, is valuable in financial terms, but that value is less tied to the specific subject you study than you might imagine. A college degree in any subject will open lots of career opportunities. Which leads me to my second piece of advice: *use these years to learn things that will serve you well no matter where your career path takes you.* Study whatever excites and engages you, which will help you persist and complete your degree. Focus less on the information and more on the skills; the information may be outdated in ten years (or sooner), but the intellectual skills and habits of mind will last you a lifetime and help you succeed in every job you hold.

## Question 2: How prepared am I for the challenges of college?

College is demanding. At a minimum, it requires an enormous investment of time and money, and depending on the education you received in high school, it is also likely to be challenging academically. You will be required to read more complex material, to write longer papers, and to do more difficult computations, among other requirements. Your instructors may have higher grading standards, put more of the responsibility for learning on you, and enforce stricter deadlines.

As you work harder to meet the academic challenges of college, you may also be juggling other demands. Perhaps you're working to support yourself, to repay loans, or to care for family members. If you're moving to a residential campus, you may be adjusting to living away from home for the first time. Unlike high school, the people and structures that used to support you may be absent or less immediate, just as the lures of campus life—socializing and discovering new interests—compete for your attention. For many college students, time management is the greatest challenge of these years.

Finally, you are likely going through a formative time in your life, especially if you're enrolling just after high school. Your values and identity may





be changing. You may be exploring your sexuality and developing intimate relationships in a new way. You may find yourself living in a more diverse community, among people from other regions or countries who hold views different from yours and who lead you to question things you always took for granted. And your college studies themselves will open your mind to ideas and perspectives that may be unsettling or exciting—or both.

Given all these challenges, it is hardly surprising that college students report high levels of stress. The COVID-19 pandemic and its ongoing effects have further contributed to mental-health issues among college students. Other factors—economic pressures, family responsibilities, and marginalization—can exacerbate these challenges.

Considering all this, you will want to do everything you can to set your-self up for success. So my third piece of advice is this: take the time to develop your support system at the outset of college, and expand and adjust it as you go. Support systems will look different for each of you. For some, family, close friends, and roommates will be key sources of support. For others, that network will include academic advisors, job supervisors, residential staff, or faculty members. Every college has health services for students. Find out where these are and how to access them. In addition, you will want to find your community, the people who share your background, your interests, and/or your struggles. This can take time, so it is important to be patient with yourself. Developing this support network is especially important, as many studies have demonstrated that students who feel they belong, who have a strong sense of connection to others at their school, have higher rates of success.<sup>9</sup>

No matter how academically well-prepared you are for college, you will do better if you anticipate the kind of support you may need and know how to access it when you need it. Like all trips to unfamiliar places, this one might unfold differently than you imagine. Virtually all students find college challenging, no matter how confident they feel going in. So give yourself permission to be surprised, and embrace the twists and turns in the road ahead. If you go into this experience expecting the unexpected, you won't be thrown off balance when things don't work out exactly as planned.

With all this in mind, this would be a good time to make a list of all the sources of support you have that can help you as you begin this journey.







Once you have clarified your goals and identified the support you need to succeed, you are ready to ask yourself one final question:

# Question 3: What academic skills will I need to develop to learn successfully in college?

Whatever else you hope to get out of college, one thing is certain: you are going to learn. College will require you to learn new things in new ways. Whatever your specific interests or long-range plans, you certainly wouldn't choose to devote this time and money to higher education if you weren't looking to become more educated. Obvious as that sounds, many students begin their college careers without reflecting on just what that means or what sort of trip they're about to take.

College is not an extension of high school. It is designed to make you think in more sophisticated ways and do things that you may or may not be prepared to do. For many, high school learning was largely about absorbing information directly from teachers or textbooks and then demonstrating your recall. Mostly, you did this by answering questions on tests or writing responses to simple, straightforward prompts. This is one part of what it means to learn, especially if what you're learning is well established, like the laws of thermodynamics or Spanish vocabulary. To be sure, you'll continue to use those skills in college, but your professors will assume you already know how to do this. Instead, college-level work requires you to master what are called higher-order or critical-thinking skills.

There are many such skills, and this book will not teach you how to handle every intellectual challenge you encounter. It will, however, cover the basic building blocks, the key critical-thinking skills you need to succeed in college. There is nothing particularly mysterious about these skills; many









people have described them in books on critical thinking, research methods, and writing. (A few of these guides are listed among the resources at the end of this book.) All your professors have learned them and employ them in their work. Rarely, though, do they explicitly introduce these analytical skills, much less explain how to acquire, apply, and improve them.

In the chapters that follow, especially chapter 2, I walk you through these critical-thinking skills, showing you how to recognize such skills in the assignments you will receive in college. My goal is to teach you to think like a college student, to acquire the intellectual tools you will use repeatedly—and, over time, in more subtle and sophisticated ways—throughout college and beyond.

It might be helpful to think of these skills as tools in your toolbox. If you've ever tried fixing something around the house, you know that not every tool is needed for every job. You also know that it may take a while to become competent at using some of the tools in your toolkit. But as you encounter more tasks, you learn to identify more quickly what needs to be done and which tools will be most useful. The same is true for intellectual problem solving. Your professors will give you various kinds of questions to answer, and your ability to respond effectively or persuasively will depend on how many intellectual tools you have at your disposal, as well as how adept you are at using them.

If you have not already developed these skills, don't worry—for the most part, neither have your classmates. From my experience as a professor and an academic advisor, I have met many smart and talented college students who didn't know the sorts of tools they needed or have the skills to use them well. In fact, many could not consistently recognize what sort of task they were being asked to work on. Most of them learned these things eventually by trial and error. While this approach can work, it also typically results in more struggling and lower grades. Or, to use my original metaphor, it's like navigating unfamiliar terrain without planning and without GPS. You might eventually find your way around, but you'll probably spend a lot of time feeling lost.

This book is designed to provide that guide to the intellectual terrain of college. Of course, that doesn't mean this book will guarantee that you ace every assignment. Instead, it will help you get oriented and improve more









quickly as you become familiar with the academic challenges of college and the skills you need to meet them. Remember, each assignment is an opportunity to practice those critical-thinking skills, a chance to improve them so you are ready to use them later in life. With enough practice, you will emerge able to think more subtly, to tackle more complex problems, and to engage with the world more broadly and creatively.

#### The Structure of the Book

This book is structured to guide you through the main skills and habits of mind that you'll need to succeed in college. Part I will introduce you to the basic skills you need to think in the ways your professors expect you to, to make sense of new subjects, and to tackle your assignments productively.

Chapter 1 focuses on what psychologists call "metacognition," that is, thinking about how we think. When you reflect on your learning process, you notice how your own learning happens, and you can think about how to become a more efficient, powerful learner.

Chapter 2 introduces the basic elements of critical thinking: exploring context, considering alternatives, weighing evidence, and identifying implications and new applications. These are the intellectual moves that college work routinely asks you to make, and having a good command of these skills will prepare you to understand everything more deeply and thoroughly.

Chapter 3 introduces you to academic disciplines. It explains how to orient yourself to a new subject so you can focus on what matters—the questions that scholars in this field ask, the methods they employ, the kind of evidence they appeal to, and the issues they still argue about.

Chapter 4 provides examples of actual college assignments and decodes them, making sure that you really understand what the professor is asking you to do. As you'll discover, the critical-thinking skills covered in chapter 2 are often embedded in the words of assignments, but not always in ways that are immediately obvious. You'll also discover that even though the assignments you get in history will look quite different from those in biology, the same basic critical-thinking skills are utilized across disciplines.







After covering these basics, part II of the book applies these critical-thinking skills to the work of reading (chapter 5), writing (chapter 6), and quantitative reasoning (chapter 7). It might seem odd to review such basic skills, but in college you will need to hone and apply these skills in more demanding contexts—to read and analyze more challenging material, to use writing as a means of fostering your critical thinking and then learning to convey your conclusions effectively, and to reason about data, especially in relation to experimental results and statistical analyses.

Chapter 8, finally, explains how to conduct research. At some point in your college career, you will need not only to understand the knowledge that others have created but to create new knowledge yourself. Conducting your own research will require that you practice the skills you have learned throughout the book—choosing a question to investigate, gathering the evidence you need to answer it, considering alternative ways of understanding that evidence, and spelling out the implications for others interested in your topic. Engaging in your own research can be among the most rewarding experiences you have in college.

Interspersed between the chapters are "Advice for the Road Ahead" mini-essays that highlight the key habits of mind you should cultivate throughout college. They are based on my own experience working with students for forty years. Getting the most from your college adventure depends not only on sharpening your intellectual skills but also on approaching your journey with an attitude of openness and curiosity.

In the conclusion, I invite you to consider the ways in which learning to think like a college student is a lifelong pursuit and to reflect on all the reasons why it is worth the effort. Apart from preparing you for a career, college will also give you the tools you need throughout your life to think about complex issues and work to resolve them.

While the structure of the book moves intentionally from introducing basic skills to their application, it is not necessary to read the chapters sequentially. The outlines at the beginning of each chapter enable you to quickly locate the specific skills you want to focus on. Feel free to allow your individual needs and interests to guide you to the parts of the book that are most relevant. Also, because many of the key ideas come up multiple times









and are developed differently in different sections of the book, I have indicated when a particular skill mentioned in one place is discussed in greater detail elsewhere. At the end of the book, you'll find a list of additional resources for deeper dives into particular skills.

. . .

Here's the bottom line: *learning to think like a college student is all about learning how to learn even more effectively than you already do.* Top college students observe their own thinking and discover how to make their learning more efficient, more strategic, and more incisive. This means identifying the skills you need to acquire, to improve, and eventually, to master.

So I encourage you to keep this book close at hand as you set off on your intellectual journey and to let it be your guide in unfamiliar and sometimes challenging terrain. College will be daunting at times and exhilarating at others. The one thing it doesn't need to be is mystifying or frustrating. I hope that this book can be your academic GPS, enabling you to navigate college with greater confidence.



