College Success

Concise

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Preface

Welcome to *College Success Concise*, an OpenStax resource. This textbook was written to increase student access to high-quality learning materials, maintaining highest standards of academic rigor at little to no cost.

About OpenStax

OpenStax is part of Rice University, which is a 501(c)(3) nonprofit charitable corporation. As an educational initiative, it's our mission to transform learning so that education works for every student. Through our partnerships with philanthropic organizations and our alliance with other educational resource companies, we're breaking down the most common barriers to learning. Because we believe that everyone should and can have access to knowledge.

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Format

You can access this textbook for free in web view or PDF through OpenStax.org, and for a low cost in print.

About *College Success Concise*

College Success Concise is designed to meet the course needs of a variety of courses, workshops, or seminars for first-year experience or college transition students. FYE programs vary greatly according to institution, so this briefer version of the original *College Success* textbook has been developed to provide the most flexibility possible for course coordinators, instructors, and instructional designers. The open license and multiple formats provide many opportunities to tailor the material to meet program-specific needs.

College Success and *College Success Concise* address the evolving challenges and opportunities of today's diverse students. The intensive development work leveraged expertise from hundreds of FYE coordinators and faculty across the country. In particular, this Concise version was crafted with the input of dozens of course coordinators and faculty who used the original text in a variety of contexts, including one-credit seminars and summer bridge programs. The topics have been carefully chosen to prioritize the most critical topics in those briefer course offerings, and the authors have organized them to create a logical and reinforcing flow. While much of the material is very similar to the original *College Success* book, this version was holistically edited and updated where needed. Users will see distinctive improvements and additions in certain areas, such as a new section on group work and greatly expanded coverage of stress, social media, and wellbeing.

While some content was removed in creating this derivative, our open license and platform allow instructors and students to reliably utilize content from the original *College Success* text. As with all of our books, instructors can link to individual textbook sections or utilize the various means of customization.

College Success Concise shares the vision and approach of the original textbook, and is rooted in core values of motivation, growth mindset, student support, and equity. The material highlights resources available to students as they embark on new roads of independence and responsibility. Within the chapters, students are given the opportunity to engage in self-analysis and reflection in order to understand their strengths, challenges, and aptitudes. Faculty and students will see the following consistent themes and approaches:

Student engagement and self-analysis are reflected in each section through applications and activities.

The diversity and intersectionality of students were considered in every example, context, and application, and the text's active surveys and detailed profiles make student voices a key element of the reading.

Interconnected topics are acknowledged and built upon, demonstrating that no element of college learning and growth occurs in isolation. The result is a cumulative, more complete understanding, which better prepares students to meet the multi-dimensional challenges of higher education.

Openly licensed and free in all digital formats, the text provides unparalleled flexibility in its use, customization, and accessibility for faculty and students. The book is provided at no cost in online, PDF, and other formats. It is also available in print for a very low price.

Robust instructor ancillaries will support faculty and course designers with teaching notes, additional exercises, worksheet versions of the in-text activities, lecture slides, and assessment items.

Features

- **Student Profiles:** The voices of real students inform every chapter. These students grapple with the same concepts, from improving study skills to embracing diversity, and through their experiences and successes we share important stories.
- **Get Connected:** Apps, websites and tech opportunities that our experts recommend to help students better face the challenges of college and life beyond the classroom.
- **Analysis and Applications:** Peppered through every chapter are opportunities for students to reflect on concepts, try out processes, and apply what they're learning.
- **Student Surveys:** Chapters begin with a survey, posing questions that will get readers engaged in considering their own level of connection and understanding of the chapter's concept, from time management to personal finance to career planning.

Estimated Module Completion Time

Each section of *College Success Concise* includes an estimate of the average time needed to read through the material and work on the activities and applications. Each student will engage the material differently, and faculty will likely prioritize or assign certain components over others. As a result, the actual time students spend will vary greatly. OpenStax will periodically update these estimates based on user feedback.

Answers to Questions in the Book

Answers to "Questions to Consider" questions are not provided to students due to the high variability of responses. The Instructor's Manual on the Instructor Resources page provides additional insight to assist in discussion about these questions. There is also a Test Bank of questions and answers only available to the instructor.

Additional Resources

Student and Instructor Resources

We've compiled additional resources for both students and instructors, including Getting Started Guides, lecture slides, and a Test Bank.

The most robust of these is the Instructor Resource Manual, developed by author Amy Baldwin based on extensive experience and requests from faculty reviewers and survey respondents. For each chapter, the IRM will contain:

- Detailed teaching suggestions
- Bloom's Taxonomy matrix, indicating the alignment of each chapter activity and application to the level of Bloom's it fulfills.
- Overarching "big picture" questions from the chapter
- Topical and cumulative case scenario activities, which present a realistic situation based on the concepts, and ask students to respond via writing or another method. These may be adapted and assigned by instructors.

Instructor resources require a verified instructor account, which you can apply for when you log in or create your account on OpenStax.org. Instructor and student resources are typically available within a few months after the book's initial publication. Take advantage of these resources to supplement your OpenStax book.

Community Hubs

OpenStax partners with the Institute for the Study of Knowledge Management in Education (ISKME) to offer Community Hubs on OER Commons—a platform for instructors to share community-created resources that support OpenStax books, free of charge. Through our Community Hubs, instructors can upload their own materials or download resources to use in their own courses, including additional ancillaries, teaching material, multimedia, and relevant course content. We encourage instructors to join the hubs for the subjects most relevant to your teaching and research as an opportunity both to enrich your courses and to engage with other faculty.

To reach the Community Hubs, visit www.oercommons.org/hubs/OpenStax.

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About the Authors

Senior Contributing Author

Amy Baldwin, University of Central Arkansas

Amy Baldwin has dedicated her entire career to supporting students in their successful transition to college. She wrote the first, groundbreaking student success textbook for community colleges and for first-generation students. After 18 years as an award-winning community college professor, she now serves as Director of the Department of Student Transitions at the University of Central Arkansas. This unique blend of experience

provides perspective on two critical student and faculty populations, which she has brought to this book and her extensive work with Complete College America, Achieving the Dream, and the Developmental Education Initiative.

Amy and her husband Kyle live in Arkansas and have two children, Emily and Will.

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1 Transitioning to College

Figure 1.1 When you choose to go to college, you are making a key decision about your future. (Credit: Germanna CC / Flickr Attribution 2.0 Generic (CC-BY 2.0))

Chapter Outline

1.1 Why College?
1.2 The First Year of College Will Be an Experience
1.3 College Culture and Expectations
1.4 It's All in the Mindset

Introduction

Student Survey

How do you feel about your ability to meet the expectations of college? These questions will help you determine how the chapter concepts relate to you right now. As we are introduced to new concepts and practices, it can be informative to reflect on how your understanding changes over time. Take this quick survey to figure it out, ranking questions on a scale of 1 – 4, 1 meaning "least like me" and 4 meaning "most like me."

Don't be concerned with the results. If your score is low, you will most likely gain even more from this book.

1. I am fully aware of the expectations of college and how to meet them.
2. I know why I am in college and have clear goals that I want to achieve.
3. Most of the time, I take responsibility for my learning new and challenging concepts.
4. I feel comfortable working with faculty, advisors, and classmates to accomplish my goals.

You can also take the Chapter 1 survey (https://openstax.org/l/collegeconcisesurvey01) anonymously online.

STUDENT PROFILE

As students transition to college, responsibility is an inherent component of self-advocacy. As someone accepted on full funding to a 4-year university, but whose life's circumstances disallowed attending college

until years later, I used to dream of a stress-free college life. The reality is, college can be a meaningful place, but it can also be challenging and unpredictable. The key is to *be your own best advocate*, because no one else is obliged to advocate on your behalf.

"When I began my community college studies, I knew what I wanted to do. Cybersecurity was my passion, but I had no understanding of how credits transfer over to a 4-year university. This came to haunt me later, after I navigated the complex processes of transferring between two different colleges. Not everyone involved volunteers information. It is up to you, the student, to be the squeaky wheel so you can get the grease. Visit office hours, make appointments, and schedule meetings with stakeholders so that you are not just buried under the sheaf of papers on someone's desk."

—Mohammed Khalid, University of Maryland

About This Chapter

In this chapter, you will learn about what you can do to get ready for college. By the time you complete this chapter, you should be able to do the following:

- Recognize the purpose and value of college.
- Describe the transitional experience of the first year of college.
- Discuss how to handle college culture and expectations.
- List the benefits of adopting a learning mindset.

Reginald	Madison
Reginald has, after much thought and with a high level of family support, decided to enroll in college. It has been a dream in the making, as he was unable to attend immediately after high school graduation. Instead, he worked several years in his family's business, got married, had a son, and then decided that he didn't want to spend the rest of his life regretting that he didn't get a chance to follow his dreams of becoming a teacher. Because it has been almost a decade since he sat in a classroom, he is worried about how he will fit in as an adult learner returning to college. Will his classmates think he is too old? Will his professors think he is not ready for the challenges of college work? Will his family get tired of his long nights at the library and his new priorities? There is so much Reginald is unsure of, yet he knows it's a step in the right direction.	It has been only three months since Madison graduated from high school. She graduated in the top 10 percent of her class, and she earned college credit while in high school. She feels academically prepared, and she has a good sense of what degree she wants to earn. Since Madison was 5 years old, she's wanted to be an engineer because she loved building things in the backyard with her father's tools. He always encouraged her to follow her dreams, and her whole family has been supportive of her hobbies and interests. However, Madison is concerned that her choice of major will keep her from dance, creative writing, and other passions. Furthermore, Madison is heading to a distant college with no other people she knows. Will she be able to find new friends quickly? Will her engineering classes crush her or motivate her to complete college? Will she be able to explore other interests? Madison has a lot on her mind, but she aims to face these challenges head-on.

While Reginald and Madison have had different experiences before and certainly have different motivations for enrolling in college, they have quite a bit in common. They are both committed to this new chapter in their lives, and they are both connected to their families in ways that can influence their commitment to this pursuit. What they don't know just yet—because they haven't started their classes—is that they will have even more in

common as they move through each term, focus on a major, and plan for life after graduation. And they have a lot in common with you as well because you are in a similar position—starting the next chapter of the rest of your life.

In this chapter, you will first learn more about identifying the reason you are in college. This is an important first step because knowing your *why* will keep you motivated. Next, the chapter will cover the transitions that you may experience as a new college student. Then, the chapter will focus on how you can acclimate to the culture and meet the expectations—all of which will make the transition to a full-fledged college student easier. Adopting a learning mindset is covered next and will provide you with research-based information that can help you develop the beliefs and habits that will result in success. Finally, the chapter will provide you with strategies for overcoming the challenges that you may face by providing information about how to find and access resources.

1.1 | Why College?

Estimated completion time: 22 minutes.

Questions to Consider:

- Why are you in college?
- What are the rewards and value of a college degree?

This chapter started with the profiles of two students, Reginald and Madison, but now we turn to who you are and why you are going to college. Starting this chapter with *you*, the student, seems to make perfect sense. Like Reginald and Madison, you are probably full of emotions as you begin a journey toward a degree and the fulfillment of a dream. Are you excited about meeting new people and *finally* getting to take classes that interest you? Are you nervous about how you are going to handle your courses and all the other activities that come along with being a college student? Are you thrilled to be making important decisions about your future? Are you worried about making the right choice when deciding on a major or a career? All these thoughts, even if contradictory at times, are normal. And you may be experiencing several of them at the same time.

Figure 1.2 Decision-making about college and our future can be challenging, but with self-analysis and support, you can feel more confident and make the best choices. (Credit: SJU Undergraduate Admissions / Flickr Attribution 2.0 Generic (CC-BY 2.0))

Why Are You in College?

We know that college is not mandatory—like kindergarten through 12th grade is—and it is not free. You are

making a *choice* to commit several years of hard work to earn a degree or credential. In some cases, you may have had to work really hard to get to this point by getting good grades and test scores in high school and earning money to pay for tuition and fees and other expenses. Now you have more at stake and a clearer path to achieving your goals, but you still need to be able to answer the question.

To help answer this question, consider the following questioning technique called "The Five Whys" that was originally created by Sakichi Toyoda, a Japanese inventor, whose strategy was used by the Toyota Motor Company to find the underlying cause of a problem. While your decision to go to college is not a problem, the exercise is helpful to uncover your underlying purpose for enrolling in college.

The process starts with a "Why" question that you want to know the answer to. Then, the next four "Why" questions use a portion of the previous answer to help you dig further into the answer to the original question. Here is an example of "The Five Whys," with the first question as "Why are you in college?" The answers and their connection to the next "Why" questions have been underlined so you can see how the process works.

While the example is one from a student who knows what she wants to major in, this process does not require that you have a specific degree or career in mind. In fact, if you are undecided, then you can explore the "why" of your indecision. For example, you may consider the following "Why" questions: Is it because you have lots of choices, or is it because you are not sure what you really want out of college?

The Five Whys in Action	
Why are you in college?	I am in college to earn a degree in speech pathology.
Why do you want to earn a degree in speech pathology?	I want to be able to help people who have trouble speaking.
Why do you want to help people who have trouble speaking?	I believe that people who have trouble speaking deserve a life they want.
Why do you feel it is important that people who have trouble speaking deserve a life they want?	I feel they often have needs that are overlooked and do not get treated equally.
Why do you want to use your voice to help these people live a life they deserve?	I feel it is my purpose to help others achieve their full potential despite having physical challenges.

Do you see how this student went beyond a standard answer about the degree that she wants to earn to connect her degree to an overall purpose that she has to help others in a specific way? Had she not been instructed to delve a little deeper with each answer, it is likely that she would not have so quickly articulated that deeper purpose. And that understanding of "why" you are in college—beyond the degree you want or the job you envision after graduation—is key to staying motivated through what will most likely be some challenging times

How else does knowing your "why," or your deeper reason for being in college, help you? According to Angela Duckworth (2016), a researcher on *grit*—what it takes for us to dig in deep when faced with adversity and continue to work toward our goal—knowing your purpose can be the booster to grit that can help you succeed.[1] Other research has found that people who have a strong sense of purpose are less likely to experience stress and anxiety (Burrow, 2013)[2] and more likely to be satisfied in their jobs (Weir, 2013).[3] Therefore, being able to answer the question "Why are you in college?" not only satisfies the person asking, but it also has direct benefits to your overall well-being. But don't worry if you don't know your purpose, or why, for being in college just yet. You can use your time taking classes and developing relationships to figure it out.

ACTIVITY

Try "The Five Whys" yourself in the table below to help you get a better sense of your purpose and to give you a worthy answer for anyone who asks you "Why are you in college?"

The Five Whys: Your Turn	
Why are you in college?	I am in college to . . .
Why do you . . .	I . . .
Why do you . . .	I . . .
Why do you . . .	I . . .
Why do you . . .	I . . .

What Are the Rewards and Value of a College Degree?

Once you have explored your "why" for enrolling in college, it may be worth reviewing what we know about the value of a college degree. There is no doubt you know people who have succeeded in a career without going to college. Famous examples of college dropouts include Bill Gates (the cofounder and CEO of Microsoft) and Ellen DeGeneres (comedian, actor, and television producer, among her many other roles).

These are two well-known, smart, talented people who have had tremendous success on a global scale. They are also not the typical profile of a student who doesn't finish a degree. For many students, especially those who are first-generation college students, a college degree helps them follow a career pathway and create a life that would not have been possible without the credential. Even in this time of rapid change in all kinds of fields, including technology and education, a college degree is still worth it for many people.

Consider the following chart that shows an average of lifetime earnings per level of education. As you can see, the more education you receive, the greater the increase in your average lifetime earnings. Even though a degree costs a considerable amount of money on the front end, if you think about it as an investment in your future, you can see that college graduates receive a substantial return on their investment. To put it into more

1   Duckworth, A. (2016). *Grit: The Power and Passion of Perseverance.* NY: Simon & Schuster.
2   Burrow, A.L. & Hill, P.L. (2013). Derailed by diversity? Purpose buffers the relationship between ethnic composition on trains and passenger negative mood. *Personality and Psychology Bulletin*, 39 (12), 1610-1619. https://doi.org/10.1177/0146167213499377.
3   Weir, K. (2013). More than job satisfaction: Psychologists are discovering what makes work meaningful--and how to create value in any job. *American Psychological Association*, 44 (11), 39.

concrete terms, let's say you spend $100,000 for a four-year degree (*Don't faint! That is the average sticker cost of a four-year degree at a public university if you include tuition, fees, room, and board*). The return on investment (ROI) over a lifetime, according to the information in the figure below, is 1,500%! You don't have to be a financial wizard to recognize that a 1,500% return is fantastic.

Earnings and Unemployment Rates by Educational Attainment, 2021
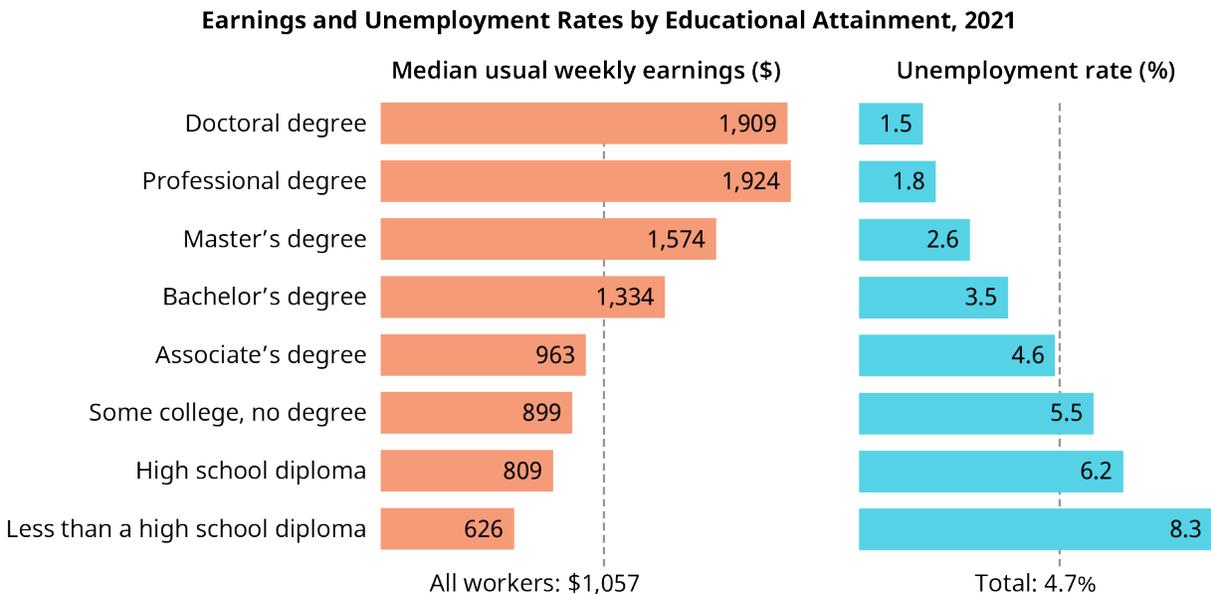
Figure 1.3 Every education level brings with it potential for greater lifetime earnings and employment opportunities. These are simply averages and may not apply to all career types and individuals. For clarity, the "professional degree," attaining the highest earnings, refers to degrees such as those given to doctors or lawyers, and the doctoral degree refers to a Ph.D. (Credit: U.S. Bureau of Labor Statistics, Current Population Survey))

Making more money over time is not the only benefit you can earn from completing a college degree. College graduates are also more likely to experience the following:

- **Greater job satisfaction.** That's right! College graduates are more likely to get a job that they like or to find that their job is more enjoyable than not.
- **Better job stability.** Employees with college degrees are more likely to find and keep a job, which is comforting news in times of economic uncertainty.
- **Improved health and wellness.** College graduates are less likely to smoke and more likely to exercise and maintain a healthy weight.
- **Better outcomes for the next generation.** One of the best benefits of a college degree is that it can have positive influences for the graduate's immediate family and the next generations.

One last thing: There is some debate as to whether a college degree is needed to land a job, and there are certainly jobs that you can get without a college degree. However, there are many reasons that a college degree can give you an edge in the job market. Here are just a few reasons that graduating with a degree is still valuable:

- More and more entry-level jobs will require a college degree. According to Georgetown University's Center on Education and the Workforce, in 2020, 35% of jobs will require a college degree.[4]
- A credential from a college or university still provides assurance that a student has mastered the material. Would you trust a doctor who never went to medical school to do open-heart surgery on a close relative? No, we didn't think so.
- College provides an opportunity to develop much-needed soft skills. The National Association of Colleges and Employers has identified eight career-readiness competencies that college students should develop:

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4   Carnevale, A.P., Smith, N., & Strohl, J. (2013). Recover: Job growth and education requirements through 2020. Georgetown University's Center on Education and the Workforce. Retrieved from https://cew.georgetown.edu/cew-reports/recovery-job-growth-and-education- requirements-through-2020/.

critical thinking/problem solving, oral/written communication, teamwork/collaboration, digital technology, leadership, professionalism/work ethic, career management, and global/intercultural fluency.[5] There are few occasions that will provide you the opportunity to develop all these skills in a low-stakes environment (i.e., without the fear of being fired!). You will learn all of this *and* more in your classes. Seems like a great opportunity, doesn't it? If you find yourself asking the question "What does *this* course have to do with my major?" or "Why do I have to take *that*?" challenge yourself to learn more about the course and look for connections between the content and your larger educational, career, and life goals.

ANALYSIS QUESTION

In what ways will earning a college degree be valuable to you now and in the future? Be sure to describe the financial, career, and personal benefits to earning a college degree.

1.2 The First Year of College Will Be an Experience

Estimated completion time: 14 minutes.

Questions to Consider:

- How will you adjust to college?
- What are the common college experiences you will have?

Adjustments to College Are Inevitable

College not only will expand your mind, but it may also make you a little uncomfortable, challenge your identity, and at times, make you doubt your abilities. It is hard to truly learn anything without getting messy. This is what education does: it transforms us. For that to happen, however, means that we will need to be open to the transformation and allow the changes to occur. *Flexibility*, *transition*, and *change* are all words that describe what you will experience. Laurie Hazard and Stephanie Carter (2018)[6] use the word *adjustment*. Hazard and Carter (2018) believe there are six adjustment areas that first-year college students experience: academic, cultural, emotional, financial, intellectual, and social. Of course, you won't go through these adjustments all at once or even in just the first year. Some will take time, while others may not even feel like much of a transition. Let's look at them in brief as a way of preparing for the road ahead:

- **Academic adjustment**. No surprises here. You will most likely—depending on your own academic background—be faced with the increased demands of learning in college. This could mean that you need to spend more time learning to learn and using those strategies to master the material.
- **Cultural adjustment.** You also will most likely experience a cultural adjustment just by being in college because most campuses have their own language (*syllabus*, *registrar*, and *office hours*, for example) and customs. You may also experience a cultural adjustment because of the diversity that you will encounter. Most likely, the people on your college campus will be different than the people at your high school—or at your workplace.
- **Emotional adjustment.** Remember the range of emotions presented at the beginning of the chapter? Those will likely be present in some form throughout your first weeks in college and at stressful times during the semester. Knowing that you may have good days and bad—and that you can bounce back from

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5 National Association of Colleges and Employers. (2019). Career readiness defined. Retrieved from https://www.naceweb.org/career-readiness/competencies/career-readiness-defined/.

6 Hazard, L., & Carter, S. (2018). A framework for helping families understand the college transition. *E-Source for College Transitions*, 16(1), 13-15.

the more stressful days—will help you find healthy ways of adjusting emotionally.

- **Financial adjustment**. Most students understand the investment they are making in their future by going to college. Even if you have all your expenses covered, there is still an adjustment to a new way of thinking about what college costs and how to pay for it. You may find that you think twice about spending money on entertainment or that you have improved your skills in finding discounted textbooks.
- **Intellectual adjustment**. Experiencing an intellectual "a-ha!" moment is one of the most rewarding parts of college, right up there with moving across the graduation stage with a degree in hand. Prepare to be surprised when you stumble across a fascinating subject or find that a class discussion changes your life. At the very least, through your academic work, you will learn to think differently about the world around you and your place in it.
- **Social adjustment**. A new place often equals new people. But in college, those new relationships can have even more meaning. Getting to know professors not only can help you learn more in your classes, but it can also help you figure out what career pathway you want to take and how to get desired internships and jobs. Learning to reduce conflicts during group work or when living with others helps build essential workplace and life skills.

Table 1.1 provides a succinct definition for each of the areas as well as examples of how you can demonstrate that you have adjusted. Think about what you have done so far to navigate these transitions in addition to other things you can do to make your college experience a successful one.

What Is It?	Students exhibit it when they:
Academic	• Take an active role in learning. • Attain college-level learning strategies. • Are open to feedback and change. • Make adjustments to learning strategies as needed.
Cultural	• Accepts and welcome differences in others. • Recognize their own cultural identity. • Seek opportunities to explore other cultures.
Emotional	• Readily handle the stressors of college life. • Develop emotional coping strategies. • Seek support from campus resources.
Financial	• Manage money independently. • Recognize the costs of college. • Explore job and aid opportunities.

Table 1.1 Six Areas of Adjustment for First-Year College Students. (Credit: Based on work by Laurie Hazard, Ed.D., and Stephanie Carter, M.A.)

What Is It?	Students exhibit it when they:
Intellectual	• Engage in intellectual discussions. • Are open to new ideas, subject areas, and career choices. • Integrate new ideas into belief systems.
Social	• Join a club or organization. • From supportive, healthy relationships. • Understand the impact of peer pressure. • Manage conflict in relationships.

Table 1.1 Six Areas of Adjustment for First-Year College Students. (Credit: Based on work by Laurie Hazard, Ed.D., and Stephanie Carter, M.A.)

"Experiencing an intellectual 'a-ha!' moment is one of the most rewarding parts of college, right up there with moving across the graduation stage with a degree in hand."

ANALYSIS QUESTION

Which of the six areas of adjustment do you think will be the least challenging for you, and which do you think will be most challenging? What can you do now to prepare for the more challenging transitions?

1.3 | College Culture and Expectations

Estimated completion time: 32 minutes.

Questions to Consider:

- What language and customs do you need to know to succeed in college?
- What is the hidden curriculum?
- What is your responsibility for learning in college?
- What resources will you use to meet these expectations?
- What are the common challenges in the first year?

College Has Its Own Language and Customs

Going to college—even if you are not far from home—is a cultural experience. It comes with its own language and customs, some of which can be confusing or confounding at first. Just like traveling to a foreign country, it is best if you prepare by learning what words mean and what you are expected to say and do in certain situations.

Let's first start with the language you may encounter. In most cases, there will be words that you have heard before, but they may have different meanings in a college setting. Take, for instance, "office hours." If you are not in college, you would think that it means the hours of a day that an office is open. If it is your dentist's office, it may mean Monday through Friday from 8 a.m. to 5 p.m. In college, "office hours" can refer to the specific hours a professor is in her office to meet with students, and those hours may be only a few each day: for example, Mondays and Wednesdays from 1 p.m. until 3 p.m.

"Syllabus" is another word that you may not have encountered, but it is one you will soon know very well. A syllabus is often called the "contract of the course" because it contains information about what to expect—from the professor and the student. It is meant to be a roadmap for succeeding in the class. Understanding that office hours are for you to ask your professor questions and the syllabus is the guide for what you will be doing in the class can make a big difference in your transition to college. The table on Common College Terms, below, has a brief list of other words that you will want to know when you hear them on campus (see Table 1.2).

Common College Terms, What They Mean, and Why You Need to Know

Term	What It Means	Why You Need to Know
Attendance policy	A policy that describes the attendance and absence expectations for a class	Professors will have different attendance expectations. Read your syllabus to determine which ones penalize you if you miss too many classes.
Final exam	A comprehensive assessment that is given at the end of a term	If your class has a final exam, you will want to prepare for it well in advance by reading assigned material, taking good notes, reviewing previous tests and assignments, and studying.
Learning	The process of acquiring knowledge	In college, most learning happens *outside* the classroom. Your professor will only cover the main ideas or the most challenging material in class. The rest of the learning will happen on your own.
Office hours	Specific hours the professor is in the office to meet with students	Visiting your professor during office hours is a good way to get questions answered and to build rapport.
Plagiarism	Using someone's words, images, or ideas as your own, without proper attribution	Plagiarism carries much more serious consequences in college, so it is best to speak to your professor about how to avoid it and review your student handbook's policy.
Study	The process of using learning strategies to understand and recall information	Studying in college may look different than studying in high school in that it may take more effort and more time to learn more complex material.
Syllabus	The contract of a course that provides information about course expectations and policies	The syllabus will provide valuable information that your professor will assume you have read and understood. Refer to it first when you have a question about the course.

Table 1.2

ACTIVITY

The language that colleges and universities use can feel familiar but mean something different, as you learned in the section above, and it can also seem alien, especially when institutions use acronyms or abbreviations for buildings, offices, and locations on campus. Terms such as "quad" or "union" can denote a location or space for students. Then there may be terms such as "TLC" (The Learning Center, in this example) that designate a specific building or office. Describe a few of the new terms you have encountered so far and what they mean. If you are not sure, ask your professor or a fellow student to define it for you.

In addition to its own language, higher education has its own way of doing things. For example, you may be familiar with what a high school teacher does, but do you know what a professor does? It certainly seems like they fulfill a very similar role as teachers in high school, but in college, professors' roles are often much more diverse. In addition to teaching, they may also conduct research, mentor graduate students, write and review research articles, serve on and lead campus committees, serve in regional and national organizations in their disciplines, apply for and administer grants, advise students in their major, and serve as sponsors for student organizations. You can be assured that their days are far from routine. See the table below for just a few differences between high school teachers and college professors.

Differences Between High School and College Faculty	
High School Faculty	**College Faculty**
Often have degrees or certifications in teaching in addition to degrees in subject matter	Most likely have not even taken a course in teaching as part of their graduate program
Responsibilities include maximizing student learning and progress in a wide array of areas	Responsibilities include providing students with content and an assessment of their mastery of the content
Are available before or after school or during class if a student has a question	Are available during office hours or by appointment if a student needs additional instruction or advice
Communicate regularly and welcome questions from parents and families about a student's progress	Cannot communicate with parents and families of students without permission because of the Federal Educational Rights and Privacy Act (FERPA)

Table 1.3

The relationships you build with your professors will be some of the most important ones you create during your college career. You will rely on them to help you find internships, write letters of recommendation, nominate you for honors or awards, and serve as references for jobs. You can develop those relationships by participating in class, visiting during office hours, asking for assistance with coursework, requesting recommendations for courses and majors, and getting to know the professor's own academic interests. One way to think about the change in how your professors will relate to you is to think about the nature of relationships you have had growing up. In Figure 1.4 You and Your Relationships Before College you will see a representation of what your relationships probably looked like. Your family may have been the greatest

influencer on you and your development.

> **"The relationships you build with your professors will be some of the most important ones during your college career."**
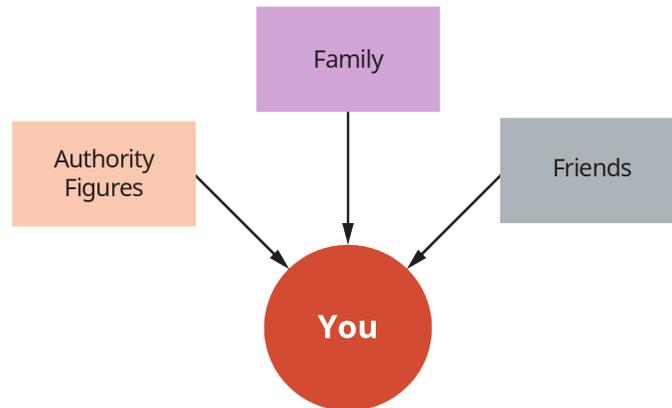
Figure 1.4 You and Your Relationships Before College

In college, your networks are going to expand in ways that will help you develop other aspects of yourself. As described above, the relationships you will have with your professors will be some of the most important. But they won't be the only relationships you will be cultivating while in college. Consider Figure 1.5, You and Your Relationships During College, and think about how you will go about expanding your network while you are completing your degree.
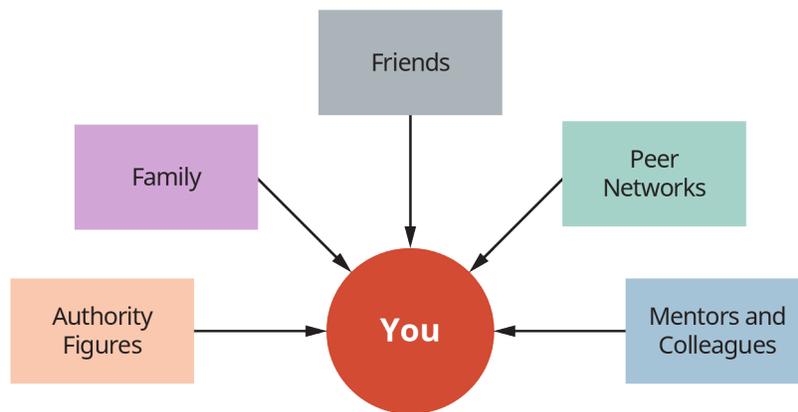
Figure 1.5 You and Your Relationships During College

Your relationships with authority figures, family, and friends may change while you are in college, and at the very least, your relationships will expand to peer networks—not friends, but near-age peers or situational peers (e.g., a first-year college student who is going back to school after being out for 20 years)—and to faculty and staff who may work alongside you, mentor you, or supervise your studies. These relationships are important because they will allow you to expand your network, especially as it relates to your career. As stated earlier, developing relationships with faculty can provide you with more than just the benefits of a mentor. Faculty often review applications for on-campus jobs or university scholarships and awards; they also have connections with graduate programs, companies, and organizations. They may recommend you to colleagues or former classmates for internships and even jobs.

Other differences between high school and college are included in Table 1.4, Differences between High School and College. Because it is not an exhaustive list of the differences, be mindful of other differences you may notice. Also, if your most recent experience has been the world of work or the military, you may find that there are more noticeable differences between those experiences and college.

Differences Between High School and College

	High School	**College**	**Why You Need to Know the Difference**
Grades	Grades are made up of frequent tests and homework, and you may be able to bring up a low initial grade by completing smaller assignments and bonuses.	Grades are often made up of fewer assignments, and initial low grades may keep you from earning high course grades at the end of the semester.	You will need to be prepared to earn high grades on all assignments because you may not have the opportunity to make up for lost ground.
Learning	Learning is often done in class with the teacher guiding the process, offering multiple ways to learn material and frequent quizzes to ensure that learning is occurring.	Learning happens mostly outside of class and on your own. Faculty are responsible for assigning material and covering the most essential ideas; you are responsible for tracking and monitoring your learning progress.	You will need to practice effective learning strategies on your own to ensure that you are mastering material at the appropriate pace.
Getting Help	Your teachers, parents, and a counselor are responsible for identifying your need for help and for creating a plan for you to get help with coursework if you need it. Extra assistance is usually reserved for students who have an official diagnosis or need.	You will most likely need help to complete all your courses successfully even if you did not need extra help in high school. You will be responsible for identifying that you need it, accessing the resources, and using them.	Because the responsibility is on you, not parents or teachers, to get the help you need, you will want to be aware of when you may be struggling to learn material. You then will need to know *where* the support can be accessed on campus or where you can access support online.
Tests and Exams	Tests cover small amounts of material and study days or study guides are common to help you focus on what you need to study. If you pay attention in class, you should be able to answer all the questions.	Tests are fewer and cover more material than in high school. If you read all the assigned material, take good notes in class, and spend time practicing effective study techniques, you should be able to answer all the questions.	This change in how much material and the depth of which you need to know the material is a shock for some students. This may mean you need to change your strategies dramatically to get the same results.

Table 1.4

Some of What You Will Learn Is "Hidden"

Many of the college expectations that have been outlined so far may not be considered common knowledge, which is one reason that so many colleges and universities have classes that help students learn what they need to know to succeed. The term *hidden curriculum*, which was coined by sociologists,[7] describes unspoken, unwritten, or unacknowledged (hence, *hidden*) rules that students are expected to follow that can affect their learning.

Situation: According to your syllabus, your history professor is lecturing on the chapter that covers the stock market crash of 1929 on Tuesday of next week.

Sounds pretty straightforward. Your professor lectures on a topic and you will be there to hear it. However, there are some unwritten rules, or hidden curriculum, that are not likely to be communicated. Can you guess what they may be?

- What is an unwritten rule about what you should be doing before attending class?
- What is an unwritten rule about what you should be doing in class?
- What is an unwritten rule about what you should be doing after class?
- What is an unwritten rule if you are not able to attend that class?

Some of your answers could have included the following:

Before class:	Review your course syllabus or planner to determine what is being covered, read the assigned chapter, take notes, record any questions you have about the reading
During class:	Focus your attention on the lecture, discussion, or activity and put away any distractions, take detailed notes, ask critical thinking or clarifying questions, avoid distractions, bring your book and your reading notes
After class:	Review what you learned in that class and connect it to other class lectures or discussions, organize your notes in relation to your other notes, start the studying process by testing yourself on the material, make an appointment with your professor if you are not clear on a concept
Absent:	Avoid asking your professor "Did I miss anything important?", communicate with the professor, get notes from a classmate, make sure you did not miss anything important in your notes

Table 1.5

The expectations before, during, and after class, as well as what you should do if you miss class, are often unspoken because many professors assume you already know and do these things or because they feel you should figure them out on your own. Nonetheless, some students struggle at first because they don't know about these habits, behaviors, and strategies. But once they learn them, they are able to meet them with ease.

Working Within the Hidden Curriculum

The first step in dealing with the hidden curriculum is to recognize it and understand how it can influence your learning. After any specific situation has been identified, the next step is to figure out how to work around the circumstances to either take advantage of any benefits or to remove any roadblocks. Let's review some other ways that you may encounter the hidden curriculum.

Prevailing Opinions. Simply put, you are going to encounter instructors and learning activities that you sometimes agree with and sometimes do not. The key is to learn from them regardless. In either case, take ownership of your learning and even make an effort to learn about other perspectives, even if it is only for

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7   P.P. Bilbao, P. I. Lucido, T. C. Iringan and R. B. Javier. (2008). *Curriculum Development.*

your own education on the matter. There is no better time to expose yourself to other opinions and philosophies than in college. In fact, many would say that this is a significant part of the college experience. With the right mindset, it is easy to view everything as a learning opportunity.

Classroom Circumstances. These kinds of circumstances often require a more structured approach to turn the situation to your advantage, but they also usually have the most obvious solutions. In a large class, you might find yourself limited in the ability to participate in classroom discussions because of so many other students. The way around that would be to speak to several classmates and create your own discussion group. You could set up a time to meet, or you could take a different route by using technology such as an online discussion board, a Zoom session, or even a group text. Several of the technologically-based solutions might even be better than an in-class discussion since you do not all have to be present at the same time. The discussion can be something that occurs all week long, giving everyone the time to think through their ideas and responses.

Again, the main point is to first spot those things in the hidden curriculum that might put your learning at a disadvantage and devise a solution that either reduces the negative impact or even becomes a learning advantage.

Learning Is Your Responsibility

As you may now realize by reviewing the differences between high school and college, learning in college will be your responsibility. Before you read about the how and why of being responsible for your own learning, complete the Activity below.

ACTIVITY

For each statement, circle the number that best represents you, with 1 indicating that the statement is least like you, and 5 indicating that the statement is most like you.

Most of the time, I can motivate myself to complete tasks even if they are boring or challenging.				
1	2	3	4	5

I regularly work hard when I need to complete a task no matter how small or big the task may be.				
1	2	3	4	5

I use different strategies to manage my time effectively and minimize procrastination to complete tasks.				
1	2	3	4	5

I regularly track my progress completing work and the quality of work I do produce.				
1	2	3	4	5

I believe how much I learn and how well I learn is my responsibility.				
1	2	3	4	5

Were you able to mark mostly 4s and 5s? If you were even able to mark at least one 4 or 5, then you are well on your way to taking responsibility for your own learning. Let's break down each statement in the components of the ownership of learning:

- **Motivation.** Being able to stay motivated while studying and balancing all you have to do in your classes will be important for meeting the rest of the components.
- **Deliberate, focused effort.** Taking ownership of learning will hinge on the effort that you put into the work. Because most learning in college will take place outside of the classroom, you will need determination to get the work done. And there will be times that the work will be challenging and maybe even boring, but finding a way to get through it when it is not exciting will pay in the long run.
- **Time and task management.** You will learn more about strategies for managing your time and the tasks of college in a later chapter, but without the ability to control your calendar, it will be difficult to block out the time to study.
- **Progress tracking.** A commitment to learning must include monitoring your learning, knowing not only what you have completed (*this is where a good time management strategy can help you track your tasks*), but also the quality of the work you have done.

Taking responsibility for your learning will take some time if you are not used to being in the driver's seat. However, if you have any difficulty making this adjustment, you can and should reach out for help along the way.

What to Expect During the First Year

While you may not experience every transition within your first year, there are rhythms to each semester of the first year and each year you are in college. Knowing what to expect each month or week can better prepare you to take advantage of the times that you have more confidence and weather through the times that seem challenging. Review the table on First-Year College Student Milestones. There will be milestones each semester you are in college, but these will serve as an introduction to what you should expect in terms of the rhythms of the semester.

First-Year College Student Milestones for the First Semester

August	September	October	November	December
Expanding social circles	Completing first test and projects	Feeling more confident about abilities	Balancing college with other obligations	Focusing on finishing strong
Experiencing homesickness or imposter syndrome	Earning "lower-than-usual" grades or not meeting personal expectations	Dealing with relationship issues	Staying healthy and reducing stress	Handling additional stress of the end of the semester
Adjusting to the pace of college	Learning to access resources for support	Planning for next semester and beyond	Thinking about majors and degrees	Thinking about the break and how to manage changes

Table 1.7 While each student's first semester will differ, you will likely experience some of the following typical college milestones.

The first few weeks will be pretty exhilarating. You will meet new people, including classmates, college staff, and professors. You may also be living in a different environment, which may mean that a roommate is another new person to get to know. Overall, you will most likely feel both excited and nervous. You can be assured that even if the beginning of the semester goes smoothly, your classes will get more challenging each week. You will be making friends, learning who in your classes seem to know what is going on, and figuring your way around campus. You may even walk into the wrong building, go to the wrong class, or have trouble finding what you need during this time. But those first-week jitters will end soon. Students who are living away from home for the first time can feel homesick in the first few weeks, and others can feel what is called "imposter syndrome," which is a fear some students have that they don't belong in college because they don't have the necessary skills for success. Those first few weeks sound pretty stressful, but the stress is temporary.

After the newness of college wears off, reality will set in. You may find that the courses and assignments do not seem much different than they did in high school (more on that later), but you may be in for a shock when you get your graded tests and papers. Many new college students find that their first grades are lower than they expected. For some students, this may mean they have earned a B when they are used to earning As, but for many students, it means they may experience their first *failing or almost-failing grades* in college because they have not used active, effective study strategies; instead, they studied how they did in high school, which is often insufficient. This can be a shock if you are not prepared, but it doesn't have to devastate you if you are willing to use it as a wake-up call to do something different.

By the middle of the semester, you'll likely feel much more confident and a little more relaxed. Your grades are improving because you started tutoring and using better study strategies. You are looking ahead, even beyond the first semester, to start planning your courses for the next term. If you are working while in college, you may also find that you have a rhythm down for balancing it all; additionally, your time management skills have likely improved.

By the last few weeks of the semester, you will be focused on the increasing importance of your assignments and upcoming finals and trying to figure out how to juggle that with the family obligations of the impending holidays. You may feel a little more pressure to prepare for finals, as this time is often viewed as the most stressful period of the semester. All of this additional workload and need to plan for the next semester can seem overwhelming, but if you plan ahead and use what you learn from this chapter and the rest of the course, you will be able to get through it more easily.

Don't Do It Alone

Think about our earlier descriptions of two students, Reginald and Madison. What if they found that the first few weeks were a little harder than they had anticipated? Should they have given up and dropped out? Or should they have talked to someone about their struggles? Here is a secret about college success that not many people know: successful students seek help. They use resources. And they do that as often as necessary to get what they need. Your professors and advisors will expect the same from you, and your college will have all kinds of offices, staff, and programs that are designed to help. This bears calling out again: *you need to use those resources*. These are called "help-seeking behaviors," and along with self-advocacy, which is speaking up for your needs, they are essential to your success. As you get more comfortable adjusting to life in college, you will find that asking for help is easier. In fact, you may become really good at it by the time you graduate, just in time for you to ask for help finding a job! Review the table on Issues, Campus Resources, and Potential Outcomes for a few examples of times you may need to ask for help. See if you can identify where on campus you can find the same or a similar resource.

Issues, Campus Resources, and Potential Outcomes

Type	Issue	Campus Resource	Potential Outcome
Academic	You are struggling to master the homework in your math class.	The campus tutoring center	A peer or professional tutor can walk you through the steps until you can do them on your own.
Health	You have felt extremely tired over the past two days and now you have a cough.	The campus health center	A licensed professional can examine you and provide care.
Social	You haven't found a group to belong to. Your classmates seem to be going in different directions and your roommate has different interests.	Student organizations and interest groups	Becoming a member of a group on campus can help you make new friends.
Financial	Your scholarship and student loan no longer cover your college expenses. You are not sure how to afford next semester.	Financial aid office	A financial aid counselor can provide you with information about your options for meeting your college expenses.

Table 1.8

APPLICATION ✓

Using a blank sheet of paper, write your name in the center of the page and circle it. Then, draw six lines from the center (see example in the figure below) and label each for the six areas of adjustment that were discussed earlier. Identify a campus resource or strategy for making a smooth adjustment for each area.
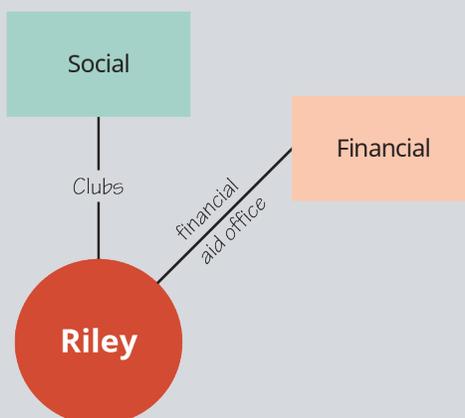

Figure 1.6 For each of the six adjustment areas mentioned above—Academic, Cultural, Emotional, Financial, Intellectual, and Social—identify a campus resource or strategy that will aid you in making a smooth adjustment.

Common Challenges in the First Year

It seems fitting to follow up the expectations for the first year with a list of common challenges that college

students encounter along the way to a degree. If you experience any—or even all—of these, the important point here is that you are not alone and that you can overcome them by using your resources. Many college students have felt like this before, and they have survived—even thrived—despite them because they were able to identify a strategy or resource that they could use to help themselves. At some point in your academic career, you may do one or more of the following:

1. **Feel like an imposter.** There is actually a name for this condition: imposter syndrome. Students who feel like an imposter are worried that they don't belong, that someone will "expose them for being a fake." This feeling is pretty common for anyone who finds themselves in a new environment and is not sure if they have what it takes to succeed. Trust the professionals who work with first-year college students: you *do* have what it takes, and you *will* succeed. Just give yourself time to get adjusted to everything.

2. **Worry about making a mistake.** This concern often goes with imposter syndrome. Students who worry about making a mistake don't like to answer questions in class, volunteer for a challenging assignment, and even ask for help from others. Instead of avoiding situations where you may fail, embrace the process of learning, which includes—is even dependent on—making mistakes. The more you practice courage in these situations and focus on what you are going to learn from failing, the more confident you become about your abilities.

3. **Try to manage everything yourself.** Even superheroes need help from sidekicks and mere mortals. Trying to handle everything on your own every time an issue arises is a recipe for getting stressed out. There will be times when you are overwhelmed by all you have to do. This is when you will need to ask for and allow others to help you.

4. **Ignore your mental and physical health needs.** If you feel you are on an emotional rollercoaster and you cannot find time to take care of yourself, then you have most likely ignored some part of your mental and physical well-being. What you need to do to stay healthy should be non-negotiable. In other words, your sleep, eating habits, exercise, and stress-reducing activities should be your highest priorities.

5. **Forget to enjoy the experience.** Whether you are 18 years old and living on campus or 48 years old starting back to college after taking a break to work and raise a family, be sure to take the time to remind yourself of the joy that learning can bring.

GET CONNECTED

Which apps help you meet the expectations of college? Will you be able to meet the expectations of being responsible for your schedule and assignments?

- My Study Life (https://openstax.org/l/mystudylife) understands how college works and provides you with a calendar, to-do list, and reminders that will help you keep track of the work you have to do.

How can you set goals and work toward them while in college?

- The Strides (https://openstax.org/l/stridesapp) app provides you with the opportunity to create SMART (Specific, Measurable, Attainable, Relevant, and Time bound) goals and track daily habits. These daily habits will add up over time toward your goals.

What can you do to develop your learning skills?

- Lumosity (https://openstax.org/l/lumosity) is a brain-training app that can help you build the thinking and learning skills you will need to meet learning challenges in college. If you want to test your memory and attention—and build your skills—take the fit test and then play different games to improve your fitness.

How can you develop networks with people in college?

- LinkedIn (https://openstax.org/l/linkedincom) is a professional networking app that allows you to create a profile and network with others. Creating a LinkedIn account as a first-year college student will help you create a professional profile that you can use to find others with similar interests.
- Internships.com (https://openstax.org/l/internships) provides information, connections, and support to help your career planning and activities. Even if you are not planning an internship right away, you may find some useful and surprising ideas and strategies to motivate your approach.

1.4 | It's All in the Mindset

Estimated completion time: 14 minutes.

Questions to Consider:

- What is a growth mindset, and how does it affect my learning?
- What are performance goals versus learning goals?

In the previous sections in this chapter, you learned about the differences between high school and college and what to expect from your course work, professors, and classmates. There is one more element of the experience that will improve your ability to meet the expectations and new challenges: Your belief in your abilities to learn, grow, and change. No doubt that you have enrolled in college because you want to do those very things, but it is easy to get discouraged and revert to old ways of thinking about your abilities if you are not mindful of what kinds of thoughts you have about yourself. This section covers the concept of a fixed mindset, or the belief that you are born with certain unchangeable talents, and growth mindset, or the belief that with effort you can improve in any area. Understanding the role that your beliefs play in the eventual outcomes of your learning can help you get through those challenges that you may encounter.

Figure 1.7 Many fields of study and work create intersections of growth and fixed mindset. People may feel great ability to grow and learn in some areas, like art and communication, but feel more limited in others, such as planning and financials. Recognizing these intersections will help you approach new topics and tasks, such as working with new classmates on projects in your chosen field.. (Credit: Lynccoff Games / Flickr Attribution 2.0 Generic (CC-BY 2.0))

Performance vs. Learning Goals

Much of our ability to learn is governed by our motivations and goals. Sometimes hidden goals or mindsets can impact the learning process. In truth, we all have goals that we might not be fully aware of, or if we are aware of them, we might not understand how they help or restrict our ability to learn. An illustration of this

can be seen in a comparison of a student that has *performance*-based goals with a student that has *learning*-based goals.

If you are a student with strict performance goals, your primary psychological concern might be to appear intelligent to others. At first, this might not seem to be a bad thing for college, but it can truly limit your ability to move forward in your own learning. Instead, you would tend to play it safe without even realizing it. For example, a student who is strictly performance-goal-oriented will often only say things in a classroom discussion when they think it will make them look knowledgeable to the instructor or their classmates. Likewise, a performance-oriented student might ask a question that they know is beyond the topic being covered (e.g., asking about the economics of Japanese whaling while discussing the book *Moby Dick* in an American literature course). Rarely will they ask a question in class because they actually do not understand a concept. Instead they will ask questions that make them look intelligent to others or in an effort to "stump the teacher." When they do finally ask an honest question, it may be because they are more afraid that their lack of understanding will result in a poor performance on an exam rather than simply wanting to learn.

If you are a student who is driven by learning goals, your interactions in classroom discussions are usually quite different. You see the opportunity to share ideas and ask questions as a way to gain knowledge quickly. In a classroom discussion you can ask for clarification immediately if you don't quite understand what is being discussed. If you are a person guided by learning goals, you are less worried about what others think since you are there to learn and you see that as the most important goal.

Another example where the difference between the two mindsets is clear can be found in assignments and other coursework. If you are a student who is more concerned about performance, you may avoid work that is challenging. You will take the "easy A" route by relying on what you already know. You will not step out of your comfort zone because your psychological goals are based on approval of your performance instead of being motivated by learning.

This is very different from a student with a learning-based psychology. If you are a student who is motivated by learning goals, you may actively seek challenging assignments, and you will put a great deal of effort into using the assignment to expand on what you already know. While getting a good grade is important to you, what is even more important is the learning itself.

If you find that you sometimes lean toward performance-based goals, do not feel discouraged. Many of the best students tend to initially focus on performance until they begin to see the ways it can restrict their learning. The key to switching to learning-based goals is often simply a matter of first recognizing the difference and seeing how making a change can positively impact your own learning.

What follows in this section is a more in-depth look at the difference between performance- and learning-based goals. This is followed by an exercise that will give you the opportunity to identify, analyze, and determine a positive course of action in a situation where you believe you could improve in this area.

Fixed vs. Growth Mindset

The research-based model of these two mindsets and their influence on learning was presented in 1988 by Carol Dweck. In Dweck's work, she determined that a student's perception about their own learning accompanied by a broader goal of learning had a significant influence on their ability to overcome challenges and grow in knowledge and ability. This has become known as the Fixed vs. Growth Mindset model. In this model, the *performance*-goal-oriented student is represented by the *fixed* mindset, while the *learning*-goal-oriented student is represented by the *growth* mindset.

In the following graphic, based on Dr. Dweck's research, you can see how many of the components associated with learning are impacted by these two mindsets.
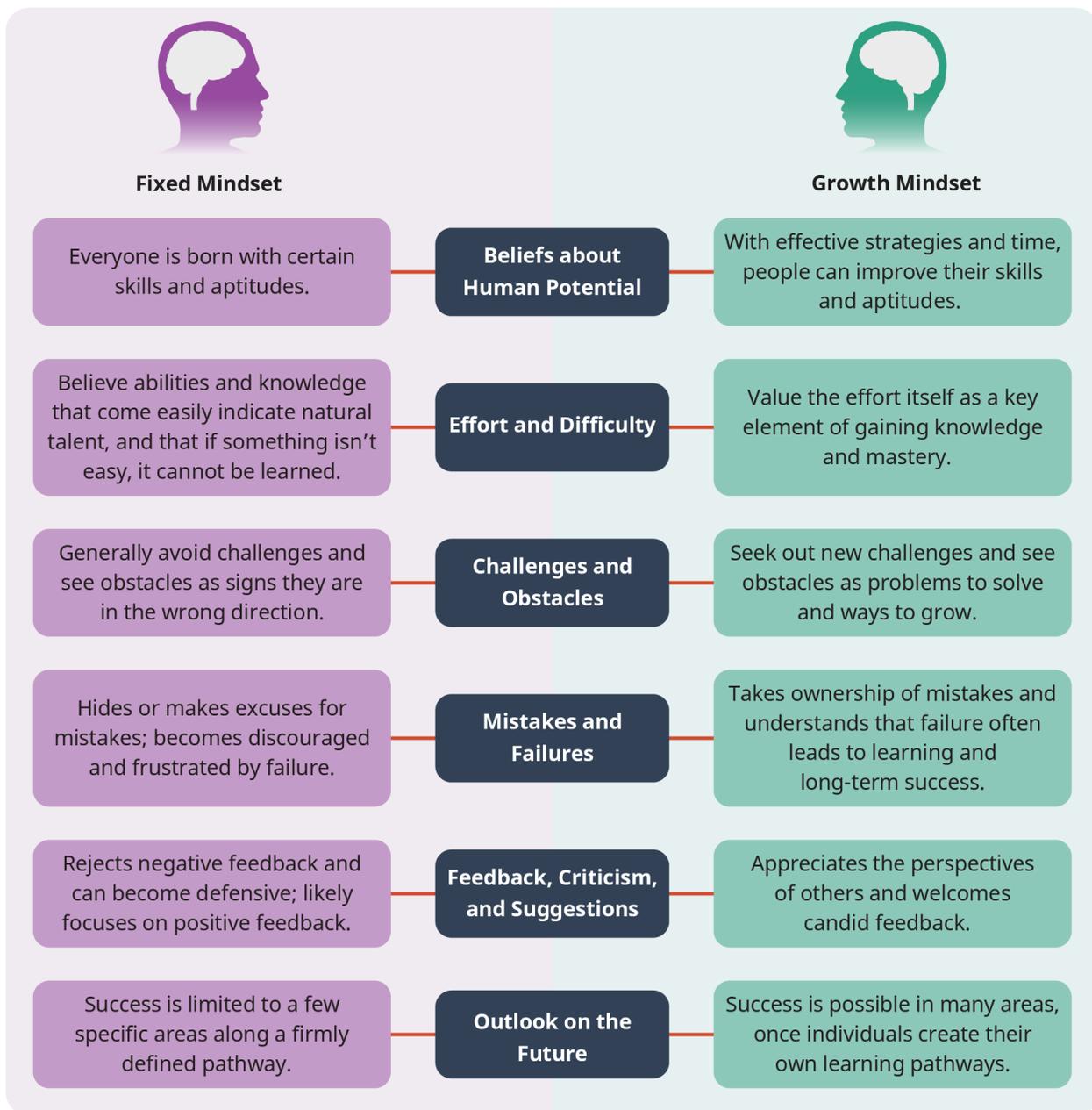
Figure 1.8 The differences between fixed and growth mindset are clear when aligned to key elements of learning and personality. (Credit: Based on work by Dr. Carol Dweck)

The Growth Mindset and Lessons About Failing

Something you may have noticed is that a growth mindset would tend to give a learner grit and persistence. If you had learning as your major goal, you would normally keep trying to attain that goal even if it took you multiple attempts. Not only that, but if you learned a little bit more with each try you would see each attempt as a success, even if you had not achieved complete mastery of whatever it was you were working to learn.

With that in mind, it should come as no surprise that Dweck found that those people who believed their abilities could change through learning (growth vs. a fixed mindset) readily accepted learning challenges and persisted despite early failures.

Improving Your Ability to Learn

As strange as it may seem, research into fixed vs. growth mindset has shown that if you believe you can learn

something new, you greatly improve your ability to learn. At first, this may seem like the sort of feel-good advice we often encounter in social media posts or quotes that are intended to inspire or motivate us (e.g., *believe in yourself!*), but in looking at the differences outlined between a fixed and a growth mindset, you can see how each part of the growth mindset path can increase your probability of success when it comes to learning.

ACTIVITY

Very few people have a strict fixed or growth mindset all of the time. Often we tend to lean one way or another in certain situations. For example, a person trying to improve their ability in a sport they enjoy may exhibit all of the growth mindset traits and characteristics, but they find themselves blocked in a fixed mindset when they try to learn something in another area like computer programming or arithmetic.

In this exercise, do a little self-analysis and think of some areas where you may find yourself hindered by a fixed mindset. Using the outline presented below, in the far right column, write down how you can change your own behavior for each of the parts of the learning process. What will you do to move from a fixed to a growth mindset? For example, say you were trying to learn to play a musical instrument. In the *Challenges* row, you might pursue a growth path by trying to play increasingly more difficult songs rather than sticking to the easy ones you have already mastered. In the *Criticism* row, you might take someone's comment about a weakness in timing as a motivation for you to practice with a metronome. For *Success of Others* you could take inspiration from a famous musician that is considered a master and study their techniques.

Whatever it is that you decide you want to use for your analysis, apply each of the Growth characteristics to determine a course of action to improve.

Parts of the learning process	Growth characteristic	What will you do to adopt a growth mindset?
Challenges	Embraces challenges	
Obstacles	Persists despite setbacks	
Effort	Sees effort as a path to success	
Criticism	Learns from criticism	
Success of Others	Finds learning and inspiration in the success of others	

Table 1.9

📰 Summary

This chapter provides an introduction to the transition to college by first asking "Why are you in college?" Understanding your "why" and what a college degree can do for you is the foundation of making a smooth transition. These experiences are part of being in college, and this chapter provides you with information about what to expect and how to handle the changes you will go through.

Now that you have read and reflected on the main ideas of the chapter, consider developing a plan to help you achieve college success by considering what you want to know more about that could help you? Review the list below and commit to working on one or more of the concepts this term and beyond.

- Research the long-term value of your college major or degree. Look at potential careers associated with your major and reflect on what you will learn during college that will help you with your career.
- Identify the hidden curriculum or unwritten rules at your institution. What do your professors expect but don't explicitly state? What are your strategies for uncovering the hidden curriculum during your college experience?
- Create a list of resources to help you in college. Choose one or more to use this term to engage and determine how well the resource helped you with a challenge.
- Reflect on the occasions in which you have exhibited a fixed mindset. What will you commit to doing that would help you exhibit a growth mindset?

2   Managing Your Time and Priorities

Figure 2.1 Our devices can be helpful tools for managing time, but they can also lead to distraction. (Credit: Nenad Stojkovic / Flickr Attribution 2.0 Generic (CC-BY 2.0))

Chapter Outline

2.1 Time Management in College
2.2 Procrastination: The Enemy Within
2.3 How to Manage Time
2.4 Prioritization
2.5 Enhanced Strategies for Time and Task Management

Introduction

Student Survey

How do you feel about your time management abilities? Take this quick survey to figure it out, ranking questions on a scale of 1–4, 1 meaning "least like me" and 4 meaning "most like me." These questions will help you determine how the chapter concepts relate to you right now. As you are introduced to new concepts and practices, it can be informative to reflect on how your understanding changes over time.

1.   I regularly procrastinate completing tasks that don't interest me or seem challenging.
2.   I use specific time management strategies to complete tasks.
3.   I find it difficult to prioritize tasks because I am not sure what is really important.
4.   I am pleased with my ability to manage my time.

You can also take the Chapter 2 survey (https://openstax.org/l/collegeconcisesurvey02) anonymously online.

STUDENT PROFILE

"Before I started college, I had heard that the amount of work would be overwhelming, and that it would be much harder than high school. That was true, but after being in college for a couple of weeks, I felt that

people made it seem scarier than it actually was. I had some homework assignments here, some essays, some hard classes, but it wasn't that bad...until midterms and finals came knocking. I had so much to study and so little time. The pressure was unimaginable. And since there was so much material to learn, I kept procrastinating. The nights before the exams were a disaster.

After the semester, I realized that I needed to do something differently. Instead of crashing before midterms and finals, I would study throughout the semester. I would review notes after class, do a few practice problems in the book even if homework wasn't assigned, and try to ask professors questions during their office hours if I was confused. This continual effort helped me do better on exams because I built up my understanding and was able to get a good night's sleep before the big test. I still studied hard, but the material was in reach and understanding it became a reasonable goal, not an impossibility. I also felt more confident going into the exams, because I knew that I had a deeper knowledge — I could recall things more easily. Most importantly, I now had peace of mind throughout the day and during the tests themselves, since I knew that I was better prepared."

—Nachum Sash, Actuarial Science Major, City University of New York

About This Chapter

In this chapter you will learn about two of the most valuable tools used for academic success: prioritizing and time management. By the time you complete this chapter, you should be able to do the following:

- Outline the reasons and effects of procrastination and provide strategies to overcome it.
- Describe ways to evaluate your own time management skills.
- Discuss the importance and the process of prioritization.
- Detail strategies and specific tactics for managing your time.

2.1 | Time Management in College

Estimated completion time: 11 minutes.

Questions to Consider:

- Is time management different in college from what I am used to?
- How different is college schoolwork from high school or on-the-job work?

You may find that time management in college is very different from anything you have experienced previously. For high school students, almost all school time is managed by educators and parents. In many cases, even after-school time may be set by scheduled activities (such as athletics) and by nightly homework that is due the next day.

In the workplace, the situation is not very different, with activities and time on task being monitored by the company and its management. An employee may also not have much say in what needs to be done and when. This is so much a part of the working environment that many companies research how much time each task should take, and they hold employees accountable for the time spent on these job functions. In fact, having good time and task management skills will help you stand out on the job and in job interviews. See the table below for a comparison of high school students and college students with regard to time and task management.

K-12	College
Many class activities are planned to facilitate, reinforce, and assess learning.	Class time is given to receiving information for the purpose of learning.
Homework is often similar for each student and assigned with the express purpose of reinforcing key concepts.	Out-of-class tasks such as reading and reviewing notes are often at the discretion of the student.
Time and tasks are managed by others more often.	Time is managed by the student.

Table 2.1 Time and Task Management in K-12 and College

In college, there is a significant difference because a great deal of time management is left up to you. While it is true that there are assignment due dates and organized classroom activities, learning at the college level requires more than just the simple completion of work. It involves decision-making and the ability to evaluate information. This is best accomplished when you are an active partner in your own learning activities.

Figure 2.2 Students may set aside specific times and specific places to study and do homework. (Credit: ThouroughlyReviewed / Flickr Attribution 2.0 Generic (CC-BY 2.0))

As an example of how this works, think about an assignment that involves giving a classroom presentation. To complete the assignment, you are given time to research and reflect on the information found. As a part of the assignment, you must reach your own conclusions and determine which information that you have found is best suited for the presentation. While the date of the actual presentation and how long it will last are usually determined by the instructor, how much time you spend gathering information, the sources you use, and how you use them are left to you.

You Have Lots of Time to Manage

For college-level learning, this approach is important enough that you can expect to spend much more time on learning activities outside the classroom than you will in the classroom. In fact, the estimated time you should spend will be at least two hours of outside learning for every one hour of lecture. Some weeks may be more intense, depending on the time of the semester and the courses you are taking. If those hours are multiplied over several courses in a given session, you can see how there is a significant amount of time to manage. Unfortunately, many students do not always take this into consideration, and they spend far less time than is needed to be successful. The results of poor time management are often a shock to them.

> **"In college, as an active participant in your own education, what you do and when you do it is largely determined by you."**

The Nature of What You Have to Do Has Changed

Returning to our example of the classroom-presentation assignment, you can see that the types of learning activities in college can be very different from what you have experienced previously. While there may have been similar assignments in high school, such as presentations or written papers, the level of expectation with length and depth is significantly different in college. This point is made very clear when comparing facts about the requirements of high school work to the type of work students produce in college. A study conducted by the Pew Research Center, found that 82 percent of teens report that their typical high school writing assignments were only a single paragraph to one page in length.[1] This is in stark contrast to a number of sources that say that writing assignments in lower-level college courses are usually 5–7 pages in length, while writing assignments in upper-level courses increase to 15–20 pages.

It is also interesting to note that the amount of writing done by a college student can differ depending on their program of study. The table below indicates the estimated average amount of writing assigned in several disciplines. To estimate the number of pages of assigned writing, the average number of writing assignments of a given page length was multiplied by an approximate number of pages for the assignment type (see Table 2.2 for time on task estimates.)

Writing Assignments Vary in Length

Discipline	Number of Pages Assigned in Introductory Course
Arts & Humanities	49
Biological Sciences, Agriculture, & Natural Resources	47
Physical Sciences, Mathematics, & Computer Science	44
Social Sciences	52
Business	48
Communications, Media, & Public Relations	50

Table 2.2 (Credit: Updated NSSE (Since 2013))[2]

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1   Pew Research Center. (2008)."Writing, Technology, and Teens. http://www.pewinternet.org/2008/04/24/writing-technology-and-teens/

Discipline	Number of Pages Assigned in Introductory Course
Education	46
Engineering	46
Health Professions	43
Social Service Professions	47

Table 2.2 (Credit: Updated NSSE (Since 2013))[2]

High school homework often consists of worksheets or tasks based on reading or classroom activities. In other words, all the students are doing the same tasks, at relatively the same time, as directed by their teachers.

Using the earlier example of the presentation assignment, not only will what you do be larger in scale, but the depth of understanding and knowledge you will put into it will be significantly more than you may have encountered in previous assignments. This is because there are greater expectations required of college graduates in the workplace. Nearly any profession that requires a college degree has with it a level of responsibility that demands higher-level thinking and therefore higher learning. An often-cited example of this is the healthcare professional. The learning requirements for that profession are strict because we depend on those graduates for our health and, in some cases, our lives. While not every profession may require the same level of study needed for healthcare, most do require that colleges maintain a certain level of academic rigor to produce graduates who are competent in their fields.

ANALYSIS QUESTION

Can you identify any areas in your life that might be a potential problem if there were a temporary setback (e.g., temporary loss of transportation, temporary loss of housing, an illness that lasted more than a week, etc.)? What could you do for a backup plan if something did happen?

2.2 | Procrastination: The Enemy Within

Estimated completion time: 13 minutes.

Questions to Consider:

- Why do we procrastinate?
- What are the effects of procrastination?
- How can we avoid procrastination?

2 http://nsse.indiana.edu/html/sample_analyses/amount_of_writing.cfm

Figure 2.3 We can think of many creative ways to procrastinate, but the outcome is often detrimental. (Credit: University of the Fraser Valley / Flickr / Attribution 2.0 Generic (CC BY 2.0))

We all know about procrastination, the act of delaying some task that needs to be completed, because most of us have procrastinated at some point in our lives. For most people, a little procrastination is not a cause for great concern. But there are situations where procrastination can become a serious problem with a lot of risk. These include when it becomes a chronic habit, when there are a number of tasks to complete and little time, or when the task being avoided is very important. In college, students who procrastinate often report that they feel more stress and are more likely to do poorly than those who have learned to manage their time and their projects effectively.

Because we all procrastinate from time to time, we usually do not give it much thought, let alone think about its causes or effects. Ironically, many of the psychological reasons for why we avoid a given task also keep us from using critical thinking to understand why procrastination can be extremely detrimental, and in some cases difficult to overcome.

To succeed at time management, you must understand some of the hurdles that may stand in your way. Procrastination is often one of the biggest. What follows is an overview of procrastination with a few suggestions on how to avoid it.

The Reasons Behind Procrastination

There are several reasons we procrastinate, and a few of them may be surprising. On the surface we often tell ourselves it is because the task is something we do not want to do, or we make excuses that there are other things more important to do first. In some cases this may be true, but there can be other contributors to procrastination that have their roots in our physical well-being or our own psychological motivations.

Lack of Energy

Sometimes we just do not feel up to a certain task. It might be due to discomfort, an illness, or just a lack of energy. If this is the case, it is important to identify the cause and remedy the situation. It could be something as simple as a lack of sleep or improper diet. Regardless, if a lack of energy is continually causing you to procrastinate to the point where you are beginning to feel stress over not getting things done, you should definitely assess the situation and address it.

Lack of Focus

Much like having low physical energy, a lack of mental focus can be a cause of procrastination. This can be due to mental fatigue, being disorganized, or allowing yourself to be distracted by other things. Again, like low physical energy, this is something that may have farther-reaching effects in your life that go beyond the act of simply avoiding a task. If it is something that is recurring, you should properly assess the situation.

Fear of Failure

This cause of procrastination is not one that many people are aware of, especially if they are the person avoiding tasks because of it. To put it in simple words, it is a bit of trickery we play on ourselves by avoiding a situation that makes us psychologically uncomfortable. Even though they may not be consciously aware of it, the person facing the task is afraid that they cannot do it or will not be able to do it well. If they fail at the task, it will make them appear incompetent to others or even to themselves. Where the self-trickery comes in is by avoiding the task. In the person's mind, they can rationalize that the reason they failed at the task was because they ran out of time to complete it, not that they were incapable of doing it in the first place.

It is important to note that a fear of failure may not have anything to do with the actual ability of the person suffering from it. They could be quite capable of doing the task and performing well, but it is the fear that holds them back.

ANALYSIS QUESTION

Consider something right now that you may be procrastinating about. Are you able to identify the cause?

The Effects of Procrastination

In addition to the causes of procrastination, you must also consider what effects it can have. Again, many of these effects are obvious and commonly understood, but some may not be so obvious and may cause other issues.

Loss of Time

The loss of time as an effect of procrastination is the easiest to identify since the act of avoiding a task comes down to not using time wisely. Procrastination can be thought of as using the time you have to complete a task in ways that do not accomplish what needs to be done.

Loss of Goals

Another of the more obvious potentially adverse effects of procrastination is the loss of goals. Completing a task leads to achieving a goal. These can be large or small (e.g., from doing well on an assignment to being hired for a good job). Without goals you might do more than delay work on a task—you may not complete it at all. The risk for the loss of goals is something that is very impactful.

Loss of Self-Esteem

Often, when we procrastinate we become frustrated and disappointed in ourselves for not getting important tasks completed. If this continues to happen, we can begin to develop a low opinion of ourselves and our own abilities. We begin to suffer from low self-esteem and might even begin to feel like there is something wrong with us. This can lead to other increasingly negative mental factors such as anger and depression. As you can see, it is important for our own well-being to avoid this kind of procrastination effect.

Stress

Procrastination causes stress and anxiety, which may seem odd since the act of procrastination is often about avoiding a task we think will be stressful in itself! Anyone who has noticed that nagging feeling when they know there is something else they should be doing is familiar with this.

On the other hand, some students see that kind of stress as a boost of mental urgency. They put off a task until they feel that surge of motivation. While this may have worked in the past, they quickly learn that procrastinating when it comes to college work almost always includes an underestimation of the tasks to be

completed— sometimes with disastrous results.

Strategies for Psyching Ourselves Out and Managing Procrastination

Now that you understand a few of the major problems procrastination can produce, let's look at methods to manage procrastination and get you on to completing the tasks, no matter how unpleasant you think they might be.

Get Organized

Much of this chapter is dedicated to defining and explaining the nature of time management. The most effective way to combat procrastination is to use time and project management strategies such as schedules, goal setting, and other techniques to get tasks accomplished in a timely manner.

Put Aside Distractions

Several of the methods discussed in this chapter deal specifically with distractions. Distractions are time-killers and are the primary way people procrastinate. It is too easy to just play a video game a little while longer, check out social media, or finish watching a movie when we are avoiding a task. Putting aside distractions is one of the primary functions of setting priorities.

Reward Yourself

Rewarding yourself for the completion of tasks or meeting goals is a good way to avoid procrastination. An example of this would be rewarding yourself with the time to watch a movie you would enjoy *after* you have finished the things you need to do, rather than using the movie to keep yourself from getting things done.

Be Accountable

A strong motivational tool is to hold ourselves accountable by telling someone else we are going to do something and when we are going to do it. This may not seem like it would be very effective, but on a psychological level we feel more compelled to do something if we tell someone else. It may be related to our need for approval from others, or it might just serve to set a level of commitment. Either way, it can help us stay on task and avoid procrastination—especially if we take our accountability to another person seriously enough to warrant contacting that person and apologizing for not doing what we said we were going to do.

2.3 | How to Manage Time

Estimated completion time: 25 minutes.

Questions to Consider:

- How can I use time-on-task estimates to improve time management?
- What behaviors can help or hinder when it comes to managing time?

In this next section you will learn about managing time and prioritizing tasks. This is not only a valuable skill for pursuing an education, but it can become an ability that follows you through the rest of your life, especially if your career takes you into a leadership role.

Figure 2.4 An online calendar is a very useful tool for keeping track of classes, meetings, and other events. Most learning management systems contain these features, or you can use a calendar application.

ANALYSIS QUESTION

Read each statement in the brief self-evaluation tool below, and check the answer that best applies to you. There are no right or wrong answers.

	Always	Usually	Sometimes	Rarely	Never
I like to be given strict deadlines for each task. It helps me stay organized and on track.					
I would rather be 15 minutes early than 1 minute late.					
I like to improvise instead of planning everything out ahead of time.					
I prefer to be able to manage when and how I do each task.					
I have a difficult time estimating how long a task will take.					

Table 2.3

	Always	Usually	Sometimes	Rarely	Never
I have more motivation when there is an upcoming deadline. It helps me focus.					
I have difficulty keeping priorities in the most beneficial order.					

Table 2.3

This exercise is intended to help you recognize some things about your own time management style. The important part is for you to identify any areas where you might be able to improve and to find solutions for them. This chapter will provide some solutions, but there are many others that can be found by researching time management strategies.

After you have decided your best response to each statement, think about what they may mean in regard to potential strengths and/or challenges for you when it comes to time management in college. If you are a person that likes strict deadlines, what would you do if you took a course that only had one large paper due at the end? Can you set a series of mini deadlines that made you more comfortable and that kept things moving along for you? Or, if you have difficulty prioritizing tasks, does it help you to make a list of the tasks to do and order them, so you know which ones must be finished first?

How to Manage Time

The simplest way to manage your time is to accurately plan for how much time it will take to do each task, and then set aside that amount of time. How you divide the time is up to you. If it is going to take you five hours to study for a final exam, you can plan to spread it over five days, with an hour each night, or you can plan on two hours one night and three hours the next. What you would not want to do is plan on studying only a few hours the night before the exam and find that you fell very short on the time you estimated you would need. If that were to happen, you would have run out of time before finishing, with no way to go back and change your decision. In this kind of situation, you might even be tempted to "pull an all-nighter," which is a phrase that has been used among college students for decades. In essence it means going without sleep for the entire night and using that time to finish an assignment. While this method of trying to make up for poor planning is common enough to have a name, rarely does it produce the best work.

ACTIVITY

Many people are not truly aware of how they actually spend their time. They make assumptions about how much time it takes to do certain things, but they never really take an accurate account.

In this activity, write down all the things you think you will do tomorrow, and estimate the time you will spend doing each. Then track each thing you have written down to see how accurate your estimates were.

Obviously, you will not want to get caught up in too much tedious detail, but you will want to cover the main activities of your day—for example, working, eating, driving, shopping, gaming, being engaged in entertainment, etc.

After you have completed this activity for a single day, you may consider doing it for an entire week so that

you are certain to include all of your activities.

Many people that take this sort of personal assessment of their time are often surprised by the results. Some even make lifestyle changes based on it.

Activity	Estimated Time	Actual Time
Practice Quiz	5 minutes	15 minutes
Lab Conclusions	20 minutes	35 minutes
Food shopping	45 minutes	30 minutes
Drive to work	20 minutes	20 minutes
Physical Therapy	1 hour	50 minutes

Table 2.4 Sample Time Estimate Table

Of all the parts of time management, accurately predicting how long a task will take is usually the most difficult—and the most elusive. Part of the problem comes from the fact that most of us are not very accurate timekeepers, especially when we are busy applying ourselves to a task. The other issue that makes it so difficult to accurately estimate time on task is that our estimations must also account for things like interruptions or unforeseen problems that cause delays.

When it comes to academic activities, many tasks can be dependent upon the completion of other things first, or the time a task takes can vary from one instance to another, both of which add to the complexity and difficulty of estimating how much time and effort are required.

For example, if an instructor assigned three chapters of reading, you would not really have any idea how long each chapter might take to read until you looked at them. The first chapter might be 30 pages long while the second is 45. The third chapter could be only 20 pages but made up mostly of charts and graphs for you to compare. By page count, it might seem that the third chapter would take the least amount of time, but actually studying charts and graphs to gather information can take longer than regular reading.

To make matters even more difficult, when it comes to estimating time on task for something as common as reading, not all reading takes the same amount of time. Fiction, for example, is usually a faster read than a technical manual. But something like the novel *Finnegan's Wake* by James Joyce is considered so difficult that most readers never finish it.

ACTIVITY

To better understand how much time different kinds of material can take to read, try this experiment. You will use two examples of famous texts that are very close to being the same number of words: *The Gettysburg Address* and the opening paragraphs from *A Christmas Carol*. Before you begin, estimate how long it will take you to read each, and predict which you think will take longer. When you do the reading, use a stopwatch function on a device such as a phone or some other timer to see how long it actually takes.

Make certain that you are reading for understanding, not just skimming over words. If you must reread a section to better comprehend what is being said, that is appropriate. The goal here is to compare reading of different texts, not to see how fast you can sight-read the words on a page.

After you have finished *The Gettysburg Address*, read and time *A Christmas Carol* and compare both of your times.

The Gettysburg Address
Abraham Lincoln
Gettysburg, Pennsylvania November 19, 1863
Word count: 278

Four score and seven years ago our fathers brought forth on this continent, a new nation, conceived in Liberty, and dedicated to the proposition that all men are created equal.

Now we are engaged in a great civil war, testing whether that nation, or any nation so conceived and so dedicated, can long endure. We are met on a great battle-field of that war. We have come to dedicate a portion of that field, as a final resting place for those who here gave their lives that that nation might live. It is altogether fitting and proper that we should do this.

But, in a larger sense, we cannot dedicate -- we cannot consecrate -- we cannot hallow -- this ground. The brave men, living and dead, who struggled here, have consecrated it, far above our poor power to add or detract. The world will little note, nor long remember what we say here, but it can never forget what they did here. It is for us the living, rather, to be dedicated here to the unfinished work which they who fought here have thus far so nobly advanced. It is rather for us to be here dedicated to the great task remaining before us -- that from these honored dead we take increased devotion to that cause for which they gave the last full measure of devotion -- that we here highly resolve that these dead shall not have died in vain -- that this nation, under God, shall have a new birth of freedom -- and that government of the people, by the people, for the people, shall not perish from the earth.

A Christmas Carol
Charles Dickens
Chapman & Hall, 1843
Word count: 260

Marley was dead: to begin with. There is no doubt whatever about that. The register of his burial was signed by the clergyman, the clerk, the undertaker, and the chief mourner. Scrooge signed it: and Scrooge's name was good upon 'Change, for anything he chose to put his hand to. Old Marley was as dead as a door-nail.

Mind! I don't mean to say that I know, of my own knowledge, what there is particularly dead about a door-nail. I might have been inclined, myself, to regard a coffin-nail as the deadest piece of ironmongery in the trade. But the wisdom of our ancestors is in the simile; and my unhallowed hands shall not disturb it, or the Country's done for. You will therefore permit me to repeat, emphatically, that Marley was as dead as a door-nail.

Scrooge knew he was dead? Of course he did. How could it be otherwise? Scrooge and he were partners for I don't know how many years. Scrooge was his sole executor, his sole administrator, his sole assign, his sole residuary legatee, his sole friend, and sole mourner. And even Scrooge was not so dreadfully cut up by the sad event, but that he was an excellent man of business on the very day of the funeral, and solemnized it with an undoubted bargain.

The mention of Marley's funeral brings me back to the point I started from. There is no doubt that Marley was dead. This must be distinctly understood, or nothing wonderful can come of the story I am going to

relate.

In comparing the two, was one or the other easier to understand or faster to read? Was it the piece you predicted you would read faster?

It is important to note that in this case both readings were only three paragraphs long. While there may have only been half a minute or so between the reading of each, that amount of time would multiply greatly over an entire chapter.

Knowing Yourself

While you can find all sorts of estimates online as to how long a certain task may take, it is important to know these are only averages. People read at different speeds, people write at different speeds, and those numbers even change for each individual depending on the environment.

If you are trying to read in surroundings that have distractions (e.g., conversations, phone calls, etc.), reading 10 pages can take you a lot longer than if you are reading in a quiet area. By the same token, you may be reading in a quiet environment (e.g., in bed after everyone in the house has gone to sleep), but if you are tired, your attention and retention may not be what it would be if you were refreshed.

In essence, the only way you are going to be able to manage your time accurately is to know yourself and to know how long it takes you to do each task. But where to begin?

Below, you will find a table of common college academic activities. This list has been compiled from a large number of different sources, including colleges, publishers, and professional educators, to help students estimate their own time on tasks. The purpose of this table is to both give you a place to begin in your estimates and to illustrate how different factors can impact the actual time spent.

You will notice that beside each task there is a column for the *unit*, followed by the average *time on task*, and a column for notes. The *unit* is whatever is being measured (e.g., pages read, pages written, etc.), and the *time on task* is an average time it takes students to do these tasks. It is important to pay attention to the notes column, because there you will find factors that influence the time on task. These factors can dramatically change the amount of time the activity takes.

Time on Task			
Activity	**Unit**	**Time on task**	**Notes**
General academic reading (textbook, professional journals)	1 page	5–7 minutes	Be aware that your personal reading speed may differ and may change over time.
Technical reading (math, charts and data)	1 page	10–15 minutes	Be aware that your personal reading speed may differ and may change over time.
Simple Quiz or homework question: short answer—oriented toward recall or identification type answers	Per question	1–2 minutes	Complexity of question will greatly influence the time required.

Table 2.5 Time on task for common college activities.

Time on Task			
Activity	**Unit**	**Time on task**	**Notes**
Complex Quiz or homework question: short answer—oriented toward application, evaluation, or synthesis of knowledge	Per question	2–3 minutes	Complexity of question will greatly influence the time required.
Math problem sets, complex	Per question	15 minutes	For example, algebra, complex equations, financial calculations
Writing: short, no research	Per page	60 minutes	Short essays, single-topic writing assignments, summaries, freewriting assignments, journaling—includes drafting, writing, proofing, and finalizing
Writing: research paper	Per page	105 minutes	Includes research time, drafting, editing, proofing, and finalizing (built into per-page calculation)
Study for quiz	Per chapter	60 minutes	45–90 minutes per chapter, depending upon complexity of material
Study for exam	Per exam	120+ minutes	1-2 hours per chapter or concept after thoroughly reading and taking notes

Table 2.5 Time on task for common college activities.

Again, these are averages, and it does not mean anything if your times are a little slower or a little faster. There is no "right amount of time," only the time that it takes you to do something so you can accurately plan and manage your time.

There is also another element to look for in the table. These are differentiations in the similar activities that will also affect the time you spend. A good example of this can be found in the first four rows. Each of these activities involves reading, but you can see that depending on the material being read and its complexity, the time spent can vary greatly. Not only do these differences in time account for the different types of materials you might read (as you found in the comparative reading exercise earlier in this chapter), but also they also take into consideration the time needed to think about what you are reading to truly understand and comprehend what it is saying.

GET CONNECTED

Which apps help you best prepare for success when managing your time?

Do you have trouble keeping track of multiple tasks over the course of a term?

Trello (https://openstax.org/l/trello) lets you organize all your obligations in helpful boards. You can share

them with others (project collaborators), set alerts as reminders, and mark tasks off as you complete them.

Do you use a particular app to help you manage your time?

Sticky note apps are available for PC, Mac, and mobile devices. They let you post quick reminders, reorganize them as needed, and view them separately or as a full to-do list.

What do you wish you could improve about your time management skills?

Toggl (https://openstax.org/l/toggl) helps you keep track of how and where you are spending your time so you can budget better and make time management changes that free you up for the really important stuff.

2.4 | Prioritization

Estimated completion time: 21 minutes.

1. Email Professor Raymond
2. Post in poly sci discussion forum
3. Psych project
4. Kyleigh's bday!!!

Stop at financial aid – fseog

Figure 2.5 Numbered lists are useful and easy tools to create.

Questions to Consider:

- Why is prioritization important?
- What are the steps involved in prioritization?
- How do I deal with situations where others' priorities are not the same as my own?
- What do I do when priorities conflict?
- What are the best ways to make sure I complete tasks?

Another key component in time management is that of prioritization. Prioritization can be thought of as ordering tasks and allotting time for them based on their identified needs or value.

This next section provides some insight into not only helping prioritize tasks and actions based on need and value, but also how to better understand the factors that contribute to prioritization.

How to Prioritize

The enemy of good prioritization is panic, or at least making decisions based on strictly emotional reactions. It can be all too easy to immediately respond to a problem as soon as it pops up without thinking of the consequences of your reaction and how it might impact other priorities. It is very natural for us to want to remove a stressful situation as soon as we can. We want the adverse emotions out of the way as quickly as possible. But when it comes to juggling multiple problems or tasks to complete, prioritizing them first may mean the difference between completing everything satisfactorily and completing nothing at all.

Make Certain You Understand the Requirements of Each Task

One of the best ways to make good decisions about the prioritization of tasks is to understand the requirements of each. If you have multiple assignments to complete and you assume one of those assignments will only take an hour, you may decide to put it off until the others are finished. Your assumption could be disastrous if you find, once you begin the assignment, that there are several extra components that you did not account for and the time to complete will be four times as long as you estimated. Or, one of the assignments may be dependent on the results of another—like participating in a study and then writing a report on the results. If you are not aware that one assignment depends upon the completion of the other before you begin, you could inadvertently do the assignments out of order and have to start over. Because of situations like this, it is critically important to understand exactly what needs to be done to complete a task before you determine its priority.

Make Decisions on Importance, Impact on Other Priorities, and Urgency

After you are aware of the requirements for each task, you can then decide your priorities based on the importance of the task and what things need to be finished in which order.

To summarize: *the key components to prioritization are making certain you understand each task and making decisions based on importance, impact, and urgency.*

ACTIVITY

To better see how things may need to be prioritized, some people make a list of the tasks they need to complete and then arrange them in a quadrant map based on importance and urgency. Traditionally this is called the Eisenhower Decision Matrix. Before becoming the 34th president of the United States, Dwight Eisenhower served as the Allied forces supreme commander during World War II and said he used this technique to better prioritize the things he needed to get done.

In this activity you will begin by making a list of things you need or want to do today and then draw your own version of the grid below. Write each item in one of the four squares; choose the square that best describes it based on its urgency and its importance. When you have completed writing each of the tasks in its appropriate square, you will see a prioritization order of your tasks. Obviously, those listed in the Important and Urgent square will be the things you need to finish first. After that will come things that are "important but not urgent," followed by "not important, but urgent," and finally "not urgent and not important."

	Urgent	Not Urgent
Important	**Urgent and Important** • Paper due tomorrow • Apply for internship by deadline	**Not Urgent but Important** • Exam next week • Flu shot
Not Important	**Urgent but Not Important** • Amazon sale • Laundry	**Not Urgent and Not Important** • Check social • TV show

Figure 2.6 The Eisenhower Matrix can help organize priorities and ensure that you focus on the correct tasks.

Who Is Driving Your Tasks?

Another thing to keep in mind when approaching time management is that while you may have greater autonomy in managing your own time, many of your tasks are being driven by a number of different individuals. These individuals are not only unaware of the other things you need to do, but they often also have goals that are in conflict with your other tasks. This means that different instructors, your manager at work, or even your friends may be trying to assert their needs into your priorities. An example of this might be a boss who would like for you to work a few hours of overtime, but you were planning on using that time to do research for a paper.

Just like assessing the requirements and needs for each priority, doing the same with how others may be influencing your available time can be an important part of time management. In some cases, keeping others informed about your priorities may help avert possible conflicts (e.g., letting your boss know you will need time on a certain evening to study, letting your friends know you plan to do a journal project on Saturday but can do something on Sunday, etc.).

It will be important to be aware of how others can drive your priorities and for you to listen to your own good judgment. In essence, time management in college is as much about managing all the elements of your life as it is about managing time for class and to complete assignments.

Making the Tough Decision When It Is Needed

Occasionally, regardless of how much you have planned or how well you have managed your time, events arise where it becomes almost impossible to accomplish everything you need to by the time required. While this is very unfortunate, it simply cannot be helped. As the saying goes, "things happen."

Finding yourself in this kind of situation is when prioritization becomes most important. You may find yourself in the uncomfortable position of only being able to complete one task or another in the time given. When this occurs with college assignments, the dilemma can be extremely stressful, but it is important to not feel overwhelmed by the anxiety of the situation so that you can make a carefully calculated decision based on the value and impact of your choice.

What Do You Do When Faced with Priority Conflicts?

As an illustration, imagine a situation where you think you can only complete one of two assignments that are both important and urgent, and you must make a choice of which one you will finish and which one you will not. This is when it becomes critical to understand all the factors involved. While it may seem that whichever assignment is worth the most points to your grade is how you make the choice, there are actually a number of other attributes that can influence your decision in order to make the most of a bad situation. For example, one of the assignments may only be worth a minimal number of points toward your total grade, but it may be foundational to the rest of the course. Not finishing it, or finishing it late, may put other future assignments in jeopardy as well. Or the instructor for one of the courses might have a "late assignment" policy that is more forgiving—something that would allow you to turn in the work a little late without too much of a penalty.

If you find yourself in a similar predicament, the first step is to try to find a way to get everything finished, regardless of the challenges. If that simply cannot happen, the next immediate step would be to communicate with your instructors to let them know about the situation. They may be able to help you decide on a course of action, or they may have options you had not thought of. Only then can you make the choices about prioritizing in a tough situation.

The key here is to make certain you are aware of and understand all the ramifications to help make the best decision when the situation dictates you make a hard choice among priorities.

Completing the Tasks

Another important part of time management is to develop approaches that will help you complete tasks in a

manner that is efficient and works for you. Most of this comes down to a little planning and being as informed about the specifics of each task as you can be.

Knowing What You Need to Do

As discussed in previous parts of this chapter, many learning activities have multiple components, and sometimes they must occur in a specific order. Additionally, some elements may not only be dependent on the order they are completed, but can also be dependent on how they are completed. To illustrate this we will analyze a task that is usually considered to be a simple one: *attending a class session.* In this analysis we will look at not only what must be accomplished to get the most out of the experience, but also at how each element is dependent upon others and must be done in a specific order. The Figure 2.7 below shows the interrelationship between the different activities, many of which might not initially seem significant enough to warrant mention, but it becomes obvious that other elements depend upon them when they are listed out this way.

Element or Task Needed for Success	Task it Depends on
Pre-class Prep	
• Completing previous homework • Reading appropriate material for lecture • Taking notes on areas that need clarification	• Understanding homework assigned from previous class • Making certain appropriate reading material is identified • Reading appropriate material for lecture
During Class	
• Understanding lecture • Taking notes on lecture • Asking questions for clarification • Taking part in class discussion • Receive assignments for next class	• Reading appropriate material • Understanding lecture • Reading appropriate material, Understanding lecture • Reading appropriate material, Understanding lecture
Post-Class	
• Understanding homework assigned • Making certain appropriate reading material is identified • Ask questions for clarification • Reviewing and rewriting notes	• Receive assignments for next class • Receive assignments for next class • Receive assignments for next class

Figure 2.7 Many of your learning activities are dependent on others, and some are the gateways to other steps.

As you can see from the graphic above, even a task as simple as "going to class" can be broken down into a number of different elements that have a good deal of dependency on other tasks. One example of this is preparing for the class lecture by reading materials ahead of time in order to make the lecture and any complex concepts easier to follow. If you did it the other way around, you might miss opportunities to ask

questions or receive clarification on the information presented during the lecture.

Understanding what you need to do and when you need to do it can be applied to any task, no matter how simple or how complex. Knowing what you need to do and planning for it can go a long way toward success and preventing unpleasant surprises.

Knowing How You Will Get It Done

After you have a clear understanding of what needs to be done to complete a task (or the component parts of a task), the next step is to create a plan for completing everything.

This may not be as easy or as simple as declaring that you will finish part one, then move on to part two, and so on. Each component may need different resources or skills to complete, and it is in your best interest to identify those ahead of time and include them as part of your plan.

A good analogy for this sort of planning is to think about it in much the same way you would preparing for a lengthy trip. With a long journey you probably would not walk out the front door and then decide how you were going to get where you were going. There are too many other decisions to be made and tasks to be completed around each choice. If you decided you were going by plane, you would need to purchase tickets, and you would have to schedule your trip around flight times. If you decided to go by car, you would need gas money and possibly a map or GPS device. What about clothes? The clothes you will need are dependent on how long you will be gone and what the climate will be like. If it is far enough away that you will need to speak another language, you may need to either acquire that skill or at least come with something or someone to help you translate.

What follows is a planning list that can help you think about and prepare for the tasks you are about to begin.

What Resources Will You Need?

The first part of this list may appear to be so obvious that it should go without mention, but it is by far one of the most critical and one of the most overlooked. Have you ever planned a trip but forgotten your most comfortable pair of shoes or neglected to book a hotel room? If a missing resource is important, the entire project can come to a complete halt. Even if the missing resource is a minor component, it may still dramatically alter the end result.

Learning activities are much the same in this way, and it is also important to keep in mind that resources may not be limited to physical objects such as paper or ink. Information can be a critical resource as well. In fact, one of the most often overlooked aspects in planning by new college students is just how much research, reading, and information they will need to complete assignments.

Figure 2.8 Allowing time to think is an important part of learning. (Credit: Juhan Sonin / Flickr / Attribution 2.0 Generic (CC BY 2.0))

For example, if you had an assignment in which you were supposed to compare and contrast a novel with a film adapted from that novel, it would be important to have access to both the movie and the book as resources. Your plans for completing the work could quickly fall apart if you learned that on the evening you planned to watch the film, it was no longer available.

What Skills Will You Need?

Poor planning or a bad assumption in this area can be disastrous, especially if some part of the task has a steep learning curve. No matter how well you planned the other parts of the project, if there is some skill needed that you do not have and you have no idea how long it will take to learn, it can be a bad situation.

Imagine a scenario where one of your class projects is to create a poster. It is your intent to use some kind of imaging software to produce professional-looking graphics and charts for the poster, but you have never used the software in that way before. It seems easy enough, but once you begin, you find the charts keep printing out in the wrong resolution. You search online for a solution, but the only thing you can find requires you to recreate them all over again in a different setting. Unfortunately, that part of the project will now take twice as long.

It can be extremely difficult to recover from a situation like that, and it could have been prevented by taking the time to learn how to do it correctly before you began or by at least including in your schedule some time to learn and practice.

What Deadlines Will You Create?

Of course, the best way to approach time management is to set realistic deadlines that take into account which elements are dependent on which others and the order in which they should be completed. Giving yourself two days to write a 20- page work of fiction is not very realistic when even many professional authors average only 6 pages per day. Your intentions may be well founded, but your use of unrealistic deadlines will not be very successful.

Setting appropriate deadlines and sticking to them is very important—so much so that several sections in the rest of this chapter touch on effective deadline practices.

How Will You Be Flexible?

It is ironic that the item on this list that comes just after a strong encouragement to make deadlines and stick to them is the suggestion to be flexible. The reason that *being flexible* has made this list is because even the best-laid plans and most accurate time management efforts can take an unexpected turn. The idea behind being flexible is to readjust your plans and deadlines when something does happen to throw things off. The worst thing you could do in such a situation is panic or just stop working because the next step in your careful planning has suddenly become a roadblock. The moment when you see that something in your plan may become an issue is when to begin readjusting your plan.

Adjusting a plan along the way is incredibly common. In fact, many professional project managers have learned that it seems something *always* happens or there is always some delay, and they have developed an approach to deal with the inevitable need for some flexibility. In essence, you could say that they are even planning for problems, mistakes, or delays from the very beginning, and they will often add a little extra time for each task to help ensure an issue does not derail the entire project or that the completion of the project does not miss the final due date.

> **"As you work through tasks, make certain you are always monitoring and adapting to ensure you complete them."**

The Importance of Where You Do Your Work

Figure 2.9 Where you do work can be as important as when. While not everyone has a study nook, it's worth taking the time to find a place or a space where you can be comfortable and focused. (Credit: IMCBerea College r / Flickr / Attribution 2.0 Generic (CC BY 2.0))

A large part of ensuring that you can complete tasks on time comes to setting up conditions that will allow you to do the work well. Much of this has to do with the environment where you will do your work. This not only includes physical space such as a work area, but other conditions like being free from distractions and your physical well-being and mental attitude.

What Space Will You Use?

Simple things, like where you are set up to do your work, can not only aid in your efficiency but also affect how well you can work or even if you can get the work completed at all. One example of this might be typing on a laptop. While it might seem more comfortable to lie back on a couch and type a long paper, sitting up at a desk or table actually increases your typing speed and reduces the number of mistakes. Even the kind of mouse you use can impact how you work, and using one you are comfortable with can make a big difference.

There are a host of other factors that can come into play as well. Do you have enough space? Is the space cluttered, or do you have the room to keep reference materials and other things you might need within arm's reach? Are there other ways you could work that might be even more efficient? For example, buying an inexpensive second monitor—even secondhand—might be the key to decreasing the amount of time you spend when you can have more than one document displayed at a time.

The key is to find what works for you and to treat your work space as another important resource needed to get the task finished.

How Will You Eliminate Distractions?

Few things are more frustrating than trying to do work while distractions are going on around you. If other people are continually interrupting you or there are things that keep pulling your attention from the task at hand, everything takes longer and you are more prone to mistakes.[3]

Many people say they work better with distractions—they prefer to leave the television or the radio on—but the truth is that an environment with too many interruptions is rarely helpful when focus is required. Before deciding that the television or talkative roommates do not bother you when you work, take an honest accounting of the work you produce with interruptions compared to work you do without.

If you find that your work is better without distractions, it is a good idea to create an environment that reduces interruptions. This may mean you have to go to a private room, use headphones, or go somewhere like a

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3   https://en.calameo.com/read/00009178915b8f5b352ba

library to work. Regardless, the importance of a distraction-free environment cannot be emphasized enough.

What Are the Best Times for You to Work?

Most people are subject to their own rhythms, cycles, and preferences throughout their day. Some are alert and energetic in the mornings, while others are considered "night owls" and prefer to work after everyone else has gone to sleep. It can be important to be aware of your own cycles and to use them to your advantage. Rarely does anyone do their best work when they are exhausted, either physically or mentally. Just as it can be difficult to work when you are physically ill, it can also be a hindrance to try to learn or do mental work when you are tired or emotionally upset.

Your working environment definitely includes your own state of mind and physical well-being. Both have a significant influence on your learning and production ability. Because of this, it is not only important to be aware of your own condition and work preferences, but to actually try to create conditions that help you in these areas. One approach is to set aside a specific time to do certain kinds of work. You might find that you concentrate better after you have eaten a meal. If that is the case, make it a habit of doing homework every night after dinner. Or you might enjoy reading more after you are ready for bed, so you do your reading assignments just before you go to sleep at night. Some people find that they are more creative during a certain time of the day or that they are more comfortable writing with subtle lighting. It is worth taking the time to find the conditions that work best for you so that you can take advantage of them.

2.5 | Enhanced Strategies for Time and Task Management

> Estimated completion time: 18 minutes.

Questions to Consider:

- What strategy helps me prioritize my top tasks?
- How do I make the best use of my time when prioritizing?
- How do I make sure I tackle unpleasant tasks instead of putting them off?
- What's the best way to plan for long-term tasks?
- How do I find time in a busy schedule?

Over the years, people have developed a number of different strategies to manage time and tasks. Some of the strategies have proven to be effective and helpful, while others have been deemed not as useful.

The good news is that the approaches that do not work very well or do not really help in managing time do not get passed along very often. But others, those which people find of value, do. What follows here are three unique strategies that have become staples of time management. While not everyone will find that all three work for them in every situation, enough people have found them beneficial to pass them along with high recommendations.

Daily Top Three

The idea behind the *daily top three* approach is that you determine which three things are the most important to finish that day, and these become the tasks that you complete. It is a very simple technique that is effective because each day you are finishing tasks and removing them from your list. Even if you took one day off a week and completed no tasks on that particular day, a *daily top three* strategy would have you finishing 18 tasks in the course of a single week. That is a good amount of things crossed off your list.

Pomodoro Technique

Figure 2.10 The Pomodoro Technique is named after a type of kitchen timer, but you can use any clock or countdown timer. (Marco Verch /Flickr / Attribution 2.0 Generic (CC BY 2.0))

The Pomodoro Technique was developed by Francesco Cirillo. The basic concept is to use a timer to set work intervals that are followed by a short break. The intervals are usually about 25 minutes long and are called *pomodoros*, which comes from the Italian word for tomato because Cirillo used a tomato-shaped kitchen timer to keep track of the intervals.

In the original technique there are six steps:

1. Decide on the task to be done.
2. Set the timer to the desired interval.
3. Work on the task.
4. When the timer goes off, put a check mark on a piece of paper.
5. If you have fewer than four check marks, take a short break (3–5 minutes), then go to Step 1 or 2 (whichever is appropriate).
6. After four pomodoros, take a longer break (15–30 minutes), reset your check mark count to zero, and then go to Step 1 or 2.
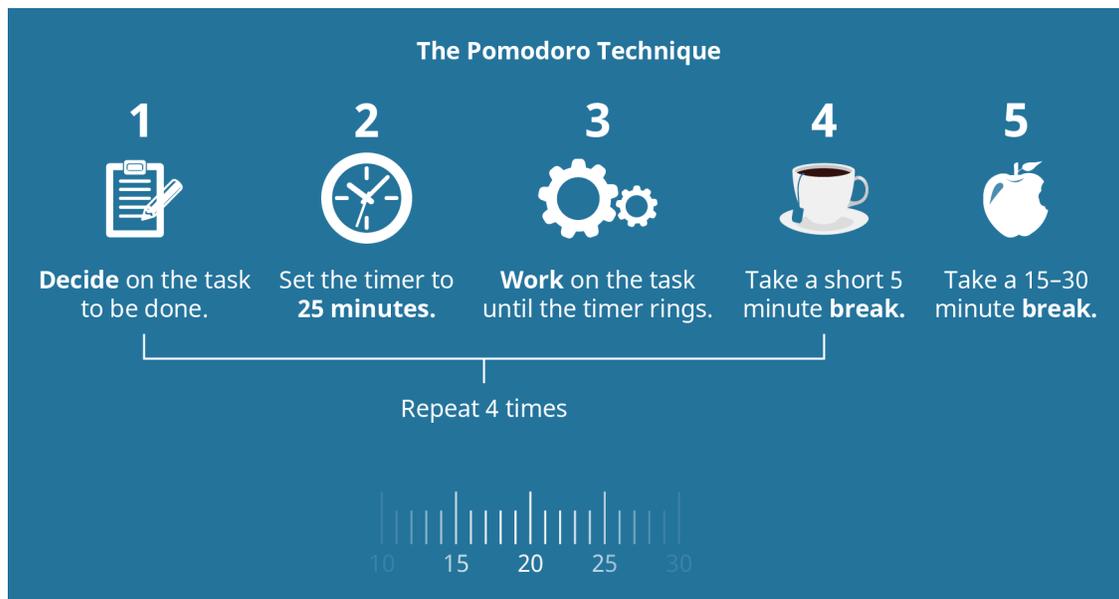
Figure 2.11 The Pomodoro Technique contains five defined steps.

There are several reasons this technique is deemed effective for many people. One is the benefit that is derived from quick cycles of work and short breaks. This helps reduce mental fatigue and the lack of productivity caused by it. Another is that it tends to encourage practitioners to break tasks down to things that can be completed in about 25 minutes, which is something that is usually manageable from the perspective of time available. It is much easier to squeeze in three 25-minute sessions of work time during the day than it is to set aside a 75- minute block of time.

Eat the Frog

Of our three quick strategies, *eat the frog* probably has the strangest name and may not sound the most inviting. The name comes from a famous quote, attributed to Mark Twain: "Eat a live frog first thing in the morning and nothing worse will happen to you the rest of the day." *Eat the Frog* is also the title of a best-selling book by Brian Tracy that deals with time management and avoiding procrastination.

How this applies to time and task management is based on the concept that if a person takes care of the biggest or most unpleasant task first, everything else will be easier after that.

Although stated in a humorous way, there is a good deal of truth in this. First, we greatly underestimate how much worry can impact our performance. If you are continually distracted by anxiety over a task you are dreading, it can affect the task you are working on at the time. Second, not only will you have a sense of accomplishment and relief when the task you are concerned with is finished and out of the way, but other tasks will seem lighter and not as difficult.

APPLICATION

Try Three Time Management Strategies

Over the next two weeks, try each of these three methods to see which ones might work for you. Is there one you favor over the others? Might each of these three approaches serve you better in different situations or with different tasks? Do you have a creative alternative or possibly a way to use some combination of these techniques?

In addition to these three strategies, you could also develop whole new approaches from suggestions

found earlier in this chapter. For example, you could apply some of the strategies for avoiding procrastination or for setting appropriate priorities and see how they work in combination with these techniques or on their own.

The key is to find which system works best for you.

Breaking Down the Steps and Spreading Them Over Shorter Work Periods

Above, you read about several different tried-and-tested strategies for effective time management—approaches that have become staples in the professional world. In this section you will read about two more creative techniques that combine elements from these other methods to handle tasks when time is scarce and long periods of time are a luxury you just do not have.

The concept behind this strategy is to break tasks into smaller, more manageable units that do not require as much time to complete. As an illustration of how this might work, imagine that you are assigned a two-page paper that is to include references. You estimate that to complete the paper—start to finish—would take you between four and a half and five hours. You look at your calendar over the next week and see that there simply are no open five-hour blocks (unless you decided to only get three hours of sleep one night). Rightly so, you decide that going without sleep is not a good option. While looking at your calendar, you do see that you can squeeze in an hour or so every night. Instead of trying to write the entire paper in one sitting, you break it up into much smaller components and schedule them over the week as shown in the two tables below:

Breaking Down Projects into Manageable-Sized Tasks

Day/Time	Task	Time
Monday, 6:00 p.m.	Write outline; look for references.	60 minutes
Tuesday, 6:00 p.m.	Research references to support outline; look for good quotes.	60 minutes
Wednesday, 7:00 p.m.	Write paper introduction and first page draft.	60 minutes
Thursday, 6:00 p.m.	Write second page and closing draft.	60 minutes
Friday, 5:00 p.m.	Rewrite and polish final draft.	60 minutes
Saturday, 10:00 a.m.	*Only if needed—finish or polish final draft.*	60 minutes?

Table 2.6

	Monday	**Tuesday**	**Wednesday**	**Thursday**	**Friday**	**Saturday**	**Sunday**
8:00–10:00		Work		Work			
10:00–12:00	Algebra	Work	Algebra	Work	Algebra	10 a.m.–11 a.m. *Only if needed*	Work
12:00–2:00	Lunch/ study	1 p.m. English Comp	Lunch/study	1 p.m. English Comp	Lunch/study	Family picnic	Work
2:00–4:00	History	English Comp	History	English Comp	History	Family picnic	
4:00–6:00	Study for Algebra quiz.	Grocery	Study for History exam.	Study for History exam.	5 p.m.–6 p.m. Rewrite and polish final draft.	Family picnic	Laundry
6:00–7:00	Write outline; look for references.	Research references to support outline; look for good quotes.	Research presentation project.	Write second page and closing draft	Create presentation.	Meet with Darcy.	Prepare school stuff for next week.
7:00–8:00	Free time	Free time	Write paper introduction and first page draft.	Research presentation project.	Create presentation.		Free time

Table 2.7

While this is a simple example, you can see how it would redistribute tasks to fit your available time in a way that would make completing the paper possible. In fact, if your time constraints were even more rigid, it would be possible to break these divided tasks down even further. You could use a variation of the Pomodoro Technique and write for three 25-minute segments each day at different times. The key is to look for ways to break down the entire task into smaller steps and spread them out to fit your schedule.

ANALYSIS QUESTION

Reflection

Analysis: Identify areas in the way you spend your day where you may be able to recapture and repurpose time. Are there things you can move around to gain more time? Are there ways you can combine tasks or reduce travel time?

📄 Summary

This chapter began by presenting why time management is important. Then, sections of the text covered how time management for college can be different from what students may have experienced before. Following this, the chapter contained several sections on how to effectively manage time (including predicting time on task), how to use technology to your advantage, and how to prioritize tasks. Other topics included specific strategies for time and task management and avoiding procrastination.

Refining your time management skills based on an honest assessment is something that should never stop. The benefits of good time management skills are something that will apply to the rest of your life, and you will no doubt be working on improving those skills for years to come. Now that you have read and reflected on the main ideas of the chapter, consider developing a plan to help you achieve college success by considering what you want to know more about that could help you. Review the list below and commit to working on one or more of the concepts this term and beyond:

- Develop better self-awareness about the psychological reasons for procrastinating and create a plan to reduce your procrastination.
- Learn to predict accurately the time needed to complete tasks in college.
- Eliminate technology and social media as distractions by setting specific times of the day you will engage in them.
- Try out additional time management strategies to supplement what you already do. Choose one to use this week and reflect on what worked or not and why.

3   Reading and Note-Taking

Figure 3.1 Reading effectively in college may require combining different sources and formats, as well as finding your own way to record and prioritize information. (Credit: Daniel Sancho / Flickr Attribution 2.0 Generic (CC-BY 2.0))

Chapter Outline

Introduction

Student Survey

How confident are you in reading actively and critically and taking good notes? Take this quick survey to figure it out, ranking questions on a scale of 1–4, 1 meaning "least like me" and 4 meaning "most like me." These questions will help you determine how the chapter concepts relate to you right now. As you are introduced to new concepts and practices, it can be informative to reflect on how your understanding changes over time.

1. I am reading on a college level.
2. I take good notes that help me study for exams.
3. I understand how to manage all the reading I need to do for college.
4. I recognize the need for different note-taking strategies for different college subjects.

You can also take the Chapter 3 survey (https://openstax.org/l/collegeconcisesurvey03) anonymously online.

STUDENT PROFILE

"Before I came to college, I always loathed reading from the textbook, taking notes during class, and even listening to lectures. I've since learned that in most cases I should do what my teacher suggests. I have a course that requires me to read two textbook chapters each week. Taking notes on the chapters is optional,

making it easy to brush off these assignments. But there are reasons that professors tell students to read and do other classwork. They believe it is valuable information for a student to learn. Note-taking in class may become tedious and, in some cases, feel redundant, but you can't recall a whole class from memory. There is not much time to learn the contents of a class in one semester, and it can feel overwhelming. It's important to take notes because writing them helps you remember."

—Christopher Naldini, Westchester Community College

About This Chapter

In this chapter we will explore two skills you probably think you already perform well—reading and note-taking. But first we will discuss what learning is and why the processes of reading and taking notes are integral to the learning process. The goal of this chapter, and your continued improvement on these skills, is to make sure you've honed them well enough to lead you to success in college. By the time you finish this chapter, you should be able to do the following:

- Describe the learning process and how reading and note-taking are an important part of it.
- Discuss the way reading differs in college and how to successfully adapt to that change.
- Demonstrate the usefulness of strong note-taking while reading and during a lecture.

Reading and consuming information are increasingly important today because of the amount of information we encounter. Not only do we need to read critically and carefully, but we also need to read with an eye to distinguishing fact from opinion and identifying solid sources. Reading helps us make sense of the world—from simple reminders to pick up milk to complex treatises on global concerns, we read to comprehend, and in so doing, our brains expand. An interesting study from Emory University in Atlanta, Georgia, used MRI scans to track the brain conductivity while participants were reading. The researchers assert that a biological change to your brain actually happens when you read, and it lingers. If you want to read the study, published in the journal *Brain Connectivity,* you can find it online at https://openstax.org/l/brainconnectivity (https://openstax.org/l/brainconnectivity).

In academic settings, as we deliberately work to become stronger readers and better notetakers, we are both helping our current situation and enhancing our abilities to be successful in the future. Seems like a win-win. Take advantage of all the study aids you have at hand, including human, electronic, and physical resources, to increase your performance in these crucial skill sets.

Why? You need to read. It improves your thinking, your vocabulary, and your ability to make connections between disparate parts, which are all parts of critical thinking. Educational researchers Anne Cunningham and Keith Stanovich discovered after extensive study with college students that "reading volume [how much you read] made a significant contribution to multiple measures of vocabulary, general knowledge, spelling, and verbal fluency."

Research continues to assess and support the fact that one of the most significant learning skills necessary for success in any field is reading. You may have performed this skill for decades already, but learning to do it more effectively and practicing the skill consistently is critical to how well you do in all subjects. If reading *isn't your thing,* strive to make that your challenge. Your academic journey, your personal well-being, and your professional endeavors will all benefit from your reading. Put forth the effort and make it your thing. The long-term benefits will far outweigh the sacrifices you make now.

3.1 │ The Learning Process

Estimated completion time: 12 minutes.

Questions to Consider:

- What are the steps to learning something new?
- How is the brain affected by learning?
- What kinds of learning are expected in college?

Have you ever thought about how we learn something new? Think back on a skill you have learned. Did you start with an interest in the topic or skill? Then, did you start practicing the skill or deepening your understanding of the topic? Perhaps you received feedback using the skill or sharing your knowledge and then you worked on refining that skill or understanding. If you participated in that process, then you did what Rita Smilkstein (2011) calls "The Natural Learning Process."[1] Here are the steps that she says we go through any time we learn:

(1) motivation;

(2) beginning practice;

(3) advanced practice to build a foundation upon which control, creativity, and critical and abstract thinking can be applied;

(4) skillfulness;

(5) refinement; and

(6) mastery.

Another way to look at learning is through the biological lens. When we go through the learning process outlined above, our brains actually change. This is called *neuroplasticity*, or the brain's ability to form or reorganize neural pathways in reaction to the learning process. This means that when you learn something new, and especially if you practice it and fail at getting it right the first time, your brain is changing. When you get better at a skill such as throwing a curve ball or learning how to solve for X, your brain is actually reorganizing itself so that you can perform those tasks more quickly.

So what does this have to do with reading and note-taking? Your learning process has to begin somewhere before you can claim mastery of a concept. Too many students try to move quickly through reading or take only partial notes because they think that just by scanning a text or listening to a lecture and jotting down a few key ideas, they have adequately learned something. True, your brain is changing during those initial processes, but it will take much more practice (also known as studying) to help you recall that information at a later date. Moreover, your goal in college classes is not just to remember the information for a test, but it is to build on that foundational knowledge to learn different levels of thinking, which we will talk about in the next section.

Bloom's Taxonomy

One aspect of learning in college is that different professors and different courses expect different types of learning from you. Figuring out how you need to learn the material and how you will be tested on it is part of learning the (sometimes) hidden curriculum.

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[1] Smilkstein, R. (2011). *We're born to learn: Using the brain's natural learning process to create today's curriculum.* Thousand Oaks, CA: Corwin Press.

If you want some insight into the types of learning you will do in college, you will want to get to know the work of Dr. Benjamin Bloom, an educational psychologist best known for his classification of different levels of learning, and the concept called Bloom's Taxonomy[2] . See Figure 3.2 for a list of the levels as well as verbs that demonstrate what you would do at each level. The bottom two levels, Remember and Understand, are called "lower levels" of Bloom's because they often take less effort than the others, and they are seen as foundational to the learning process.

The remaining levels are considered "higher levels" of Bloom's because they often require you not only understand the information, but also do something with it: apply it to a new situation, analyze its components, evaluate its strengths and weaknesses, or create something new from your knowledge. Not all of your learning in college and the workplace will be at the higher levels of Bloom's Taxonomy, but as you gain more knowledge and develop more sophisticated academic and workplace skills, you will move beyond merely remembering information.

Let's break down the different levels so you have a better understanding of them. The first and lowest level is "Remember." At this level, you are attempting to recall information, such as definitions of terms or steps in a process. You don't have to really understand (that will come next) the concepts at this level. For example, you may be able to memorize the steps of the Krebs Cycle by naming them in order, but that doesn't mean you truly understand the processes involved and the effects of each step.

The second level is "Understand." This is the stage in which you can explain or describe a concept in your own words. Usually, if you have restated a term, concept, or process in your own words, you have a basic understanding of it. Again, these are lower levels of Bloom's Taxonomy and are the fundamental first steps if you want to move higher up on the taxonomy. The next level is "Apply," which indicates that you know the concept well enough to use it in a new context. Math classes often ask you to remember and understand the steps of a formula and the reason you would use it, but then ask that you use that formula in a new problem.

The levels in which you "Analyze" and "Evaluate" require that you be able to examine the concepts in depth and be able to, for example, compare and contrast a concept with another concept (Analyze) or choose the best concept among others (Evaluate). The final level is "Create," which, according to Bloom, is the pinnacle of learning: If you can create (or recreate) something new based on what you have learned, you have demonstrated understanding of a concept, idea, or skill.

We will revisit Bloom's Taxonomy in the chapter on studying, but it is worth introducing in relation to reading and note-taking because students who read texts and take notes on their readings or the professor's lectures are often capturing information to remember it later. This is a good first step to the learning process, but as you will see later, that is not the only or final step to learning.

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2   Bloom, B.S. (1980). All our children learning. NY: McGraw-Hill.

Bloom's Taxonomy–Cognitive Domain (2001)
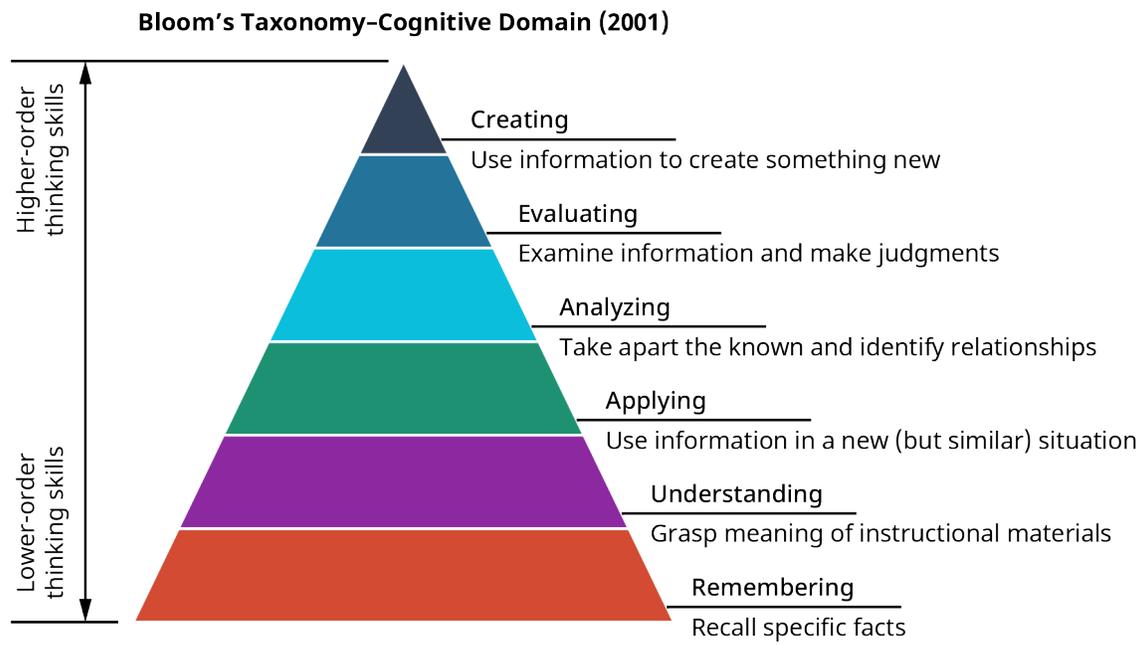
Figure 3.2 Bloom's Taxonomy provides both instructors and students with a method to classify learning objectives and skills into different levels of complexity.

3.2 | The Nature and Types of Reading

Estimated completion time: 16 minutes.

Questions to Consider:

- How can distinguishing between reading types help you academically and personally?
- How can you best prepare to read for college?

Research supports the idea that reading is good for you. Students who read at or above reading level throughout elementary and secondary school have a higher chance of starting—and more importantly, finishing—college. Educational researchers convincingly claim that reading improves everything from grades to vocabulary.[3]

If you don't particularly enjoy reading, don't despair. We read for a variety of reasons, and you may just have to step back and take a bigger picture of your reading habits to understand why you avoid engaging in this important skill. The myriad distractions we now face as well as the intense information overload we can suffer on a daily basis in all aspects of our lives can combine to make it difficult to slow down to read, an activity that demands at least a modicum of attention in a way that most television and music do not. You may need to adjust your schedule for more reading time, especially in college, because every class you take will expect you to read more pages than you probably have in the past.

One last suggestion about reading: Many students report that they don't like to read unless they are already interested in the topic. This is understandable when considering that many assigned texts in college may be

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3   Cunningham, A. and Stanovich, K. (1998). "What reading does for the mind." The American Federation of Teachers. *American Educator*, Vol. 22, No. 1–2, pp. 8–15.

something students are not familiar with, don't immediately see the benefit of knowing, and are written in a less-than-engaging manner. Your goal when assigned reading that seems "uninteresting" is to develop your curiosity about the subject and approach your reading like a detective looking for clues to solve a larger mystery. Asking yourself "What will I gain from reading this?" and "How will this reading help me develop skills that I will need now and in the future?" are good places to start with developing curiosity. You may be surprised that you are interested in the topic and want to expand your knowledge by reading more about it.

Types of Reading

You may read small items purely for immediate information, such as notes, e-mails, or directions to an unfamiliar location. You can find all sorts of information online about how to fix a faucet or tie a secure knot. You won't have to spend too much time reading these sorts of texts because you have a specific goal in mind for them, and once you have accomplished that goal, you do not need to prolong the reading experience. These encounters with texts may not be memorable or stunning, but they don't need to be. When we consider why we read longer pieces—outside of reading for pleasure—we can usually categorize the reasons into about two categories: 1) reading to introduce ourselves to new content, and 2) reading to more fully comprehend familiar content.

Figure 3.3 A bookstore or library can be a great place to explore. Aside from books and resources you need, you may find something that interests you or helps with your course work. (Credit: MarLeah Cole / Flickr Attribution 2.0 Generic (CC-BY 2.0))

Reading to Introduce New Content

Consider the following scenario: Glenn felt uncomfortable talking with his new roommates because he realized very quickly that he didn't know anything about their major—architecture. Of course he knew that it had something to do with buildings and construction sites, but the field was so different from his discipline of biology that he decided he needed to find out more so he could at least engage in friendly conversation with his roommates. Since he would likely not go into their field, he didn't need to go into full research mode. Glenn's purpose for reading was specific to his situation. When we read to discover new content, we can start off small and increase to better and more sophisticated sources. Much of our further study and reading depends on the sources we originally read, our purpose for finding out about this new topic, and our interest

level.

Chances are, you have done this sort of exploratory reading before. You may read reviews of a new restaurant or look at what people say about a movie you aren't sure you want to spend the money to see at the theater. This reading helps you decide. In academic settings, much of what you read in your courses may be relatively new content to you. You may have heard the word *volcano* and have a general notion of what it means, but until you study geology and other sciences in depth, you may not have a full understanding of the environmental origins, ecological impacts, and societal and historic responses to volcanoes.

These perspectives will come from reading and digesting various material. When you are working with new content, you may need to schedule more time for reading and comprehending the information because you may need to look up unfamiliar terminology and you may have to stop more frequently to make sure you are truly grasping what the material means. When you have few ways to connect new material to your own prior knowledge, you have to work more diligently to comprehend it.

APPLICATION

Try an experiment with a group of classmates. Without looking on the Internet, try to brainstorm a list of 10 topics about which all of you may be interested but for which you know very little or nothing at all. Try to make the topics somewhat obscure rather than ordinary—for example, the possibility of the non-planet Pluto being reclassified again as opposed to something like why we need to drink water.

After you have this random list, think of ways you could find information to read about these weird topics. Our short answer is always: Google. But think of other ways as well. How else could you read about these topics if you don't know anything about them? You may well be in a similar circumstance in some of your college classes, so you should listen carefully to your classmates on this one. Think beyond pat answers such as "I'd go to the library," and press for what that researcher would do once at the library. What types of articles or books would you try to find? One reason that you should not always ignore the idea of doing research at the physical library is because once you are there and looking for information, you have a vast number of other sources readily available to you in a highly organized location. You also can tap into the human resources represented by the research librarians who likely can redirect you if you cannot find appropriate sources.

Reading to Comprehend Familiar Content

Reading about unfamiliar content is one thing, but what if you do know something about a topic already? Do you really still need to keep reading about it? Probably. For example, what if during the brainstorming activity in the activity above, you secretly felt rather smug because you know about the demotion of the one-time planet Pluto and that there is currently quite the scientific debate going on about that whole de-planet-ation thing. Of course, you didn't say anything during the study session, mostly to spare your classmates any embarrassment, but you are pretty familiar with Pluto-gate. So now what? Can you learn anything new?

Again—probably. When did Pluto's qualifications to be considered a planet come into question? What are the qualifications for being considered a planet? Why? Who even gets to decide these things? Why was it called *Pluto* in the first place? On Amazon alone, you can find hundreds of books about the once-planet Pluto (not to be confused with the Disney dog also named Pluto). A Google search brings up over 34 million options for your reading pleasure. You'll have plenty to read, even if you do know something or quite a bit about a topic, but you'll approach reading about a familiar topic and an unfamiliar one differently.

With familiar content, you can do some initial skimming to determine what you already know in the book or article, and mark what may be new information or a different perspective. You may not have to give your full

attention to the information you know, but you will spend more time on the new viewpoints so you can determine how this new data meshes with what you already know. Is this writer claiming a radical new definition for the topic or an entirely opposite way to consider the subject matter, connecting it to other topics or disciplines in ways you have never considered?

When college students encounter material in a discipline-specific context and have some familiarity with the topic, they sometimes can allow themselves to become a bit overconfident about their knowledge level. Just because a student may have read an article or two or may have seen a TV documentary on a subject such as the criminal mind, that does not make them an expert. What makes an expert is a person who thoroughly studies a subject, usually for years, and understands all the possible perspectives of a subject as well as the potential for misunderstanding due to personal biases and the availability of false information about the topic.

3.3 | Effective Reading Strategies

Estimated completion time: 25 minutes.

Questions to Consider:

- What methods can you incorporate into your routine to allow adequate time for reading?
- What are the benefits and approaches to active and critical reading?
- Do your courses or major have specific reading requirements?

Allowing Adequate Time for Reading

You should determine the reading requirements and expectations for every class very early in the semester. You also need to understand why you are reading the particular text you are assigned. Do you need to read closely for minute details that determine cause and effect? Or is your instructor asking you to skim several sources so you become more familiar with the topic? Knowing this reasoning will help you decide your timing, what notes to take, and how best to undertake the reading assignment.

Figure 3.4 If you plan to make time for reading while you commute, remember that unexpected events like delays and cancellations could impact your concentration. (Credit: The LEAF Project / Flickr, Public Domain (CC-0))

Depending on the makeup of your schedule, you may end up reading both primary sources—such as legal documents, historic letters, or diaries—as well as textbooks, articles, and secondary sources, such as summaries or argumentative essays that use primary sources to stake a claim. You may also need to read

current journalistic texts to stay up to date in local or global affairs. A realistic approach to scheduling your time to allow you to read and review all the reading you have for the semester will help you accomplish what can sometimes seem like an overwhelming task.

When you allow adequate time in your hectic schedule for reading, you are investing in your own success. Reading isn't a magic pill, but it may seem like it when you consider all the benefits people reap from this ordinary practice. Famous successful people throughout history have been voracious readers. In fact, former U.S. president Harry Truman once said, "Not all readers are leaders, but all leaders are readers." Writer of the U.S. Declaration of Independence, inventor, and also former U.S. president Thomas Jefferson claimed "I cannot live without books" at a time when keeping and reading books was an expensive pastime. Knowing what it meant to be kept from the joys of reading, 19th-century abolitionist Frederick Douglass said, "Once you learn to read, you will be forever free." And finally, George R. R. Martin, the prolific author of the wildly successful *Game of Thrones* empire, declared, "A reader lives a thousand lives before he dies . . . The man who never reads lives only one."

You can make time for reading in a number of ways that include determining your usual reading pace and speed, scheduling active reading sessions, and practicing recursive reading strategies.

Determining Reading Speed and Pacing

To determine your reading speed, select a section of text—passages in a textbook or pages in a novel. Time yourself reading that material for exactly 5 minutes, and note how much reading you accomplished in those 5 minutes. Multiply the amount of reading you accomplished in 5 minutes by 12 to determine your average reading pace (5 times 12 equals the 60 minutes of an hour). Of course, your reading pace will be different and take longer if you are taking notes while you read, but this calculation of reading pace gives you a good way to estimate your reading speed that you can adapt to other forms of reading.

Example Reading Times

Reader	Pages Read in 5 Minutes	Pages per Hour	Approximate Hours to Read 500 Pages
Marta	4	48	10 hours, 30 minutes
Jordi	3	36	13 hours
Estevan	5	60	8 hours, 20 minutes

Table 3.1

In the table above, you can see three students with different reading speeds. So, for instance, if Marta was able to read 4 pages of a dense novel for her English class in 5 minutes, she should be able to read about 48 pages in one hour. Knowing this, Marta can accurately determine how much time she needs to devote to finishing the novel within a set amount of time, instead of just guessing. If the novel Marta is reading is 497 pages, then Marta would take the total page count (497) and divide that by her hourly reading rate (48 pages/hour) to determine that she needs about 10 to 11 hours overall. To finish the novel spread out over two weeks, Marta needs to read a little under an hour a day to accomplish this goal.

Calculating your reading rate in this manner does not take into account days where you're too distracted and you have to reread passages or days when you just aren't in the mood to read. And your reading rate will likely vary depending on how dense the content you're reading is (e.g., a complex textbook vs. a comic book). Your pace may slow down somewhat if you are not very interested in what the text is about. What this method *will* help you do is be realistic about your reading time as opposed to waging a guess based on nothing and then

becoming worried when you have far more reading to finish than the time available.

Chapter 2, "Managing Your Time and Priorities," offers more detail on how best to determine your speed from one type of reading to the next so you are better able to schedule your reading.

Scheduling Set Times for Active Reading

Active reading takes longer than reading through passages without stopping. You may not need to read your latest sci-fi series actively while you're lounging on the beach, but many other reading situations demand more attention from you. Active reading is particularly important for college courses. You are a scholar actively engaging with the text by posing questions, seeking answers, and clarifying any confusing elements. Plan to spend at least twice as long to read actively than to read passages without taking notes or otherwise marking select elements of the text.

To determine the time you need for active reading, use the same calculations you use to determine your traditional reading speed and double it. Remember that you need to determine your reading pace for all the classes you have in a particular semester and multiply your speed by the number of classes you have that require different types of reading. The table below shows the differences in time needed between reading quickly without taking notes and reading actively.

Example Active Reading Times

Reader	Pages Read in 5 Minutes	Pages per Hour	Approximate Hours to Read 500 Pages	Approximate Hours to Actively Read 500 Pages
Marta	4	48	10 hours, 30 minutes	21 hours
Jordi	3	36	13 hours	26 hours
Estevan	5	60	8 hours, 20 minutes	16 hours, 40 minutes

Table 3.2

Practicing Recursive Reading Strategies

One fact about reading for college courses that may become frustrating is that, in a way, it never ends. For all the reading you do, you end up doing even more rereading. It may be the same content, but you may be reading the passage more than once to detect the emphasis the writer places on one aspect of the topic or how frequently the writer dismisses a significant counterargument. This rereading is called recursive reading.

For most of what you read at the college level, you are trying to make sense of the text for a specific purpose—not just because the topic interests or entertains you. You need your full attention to decipher everything that's going on in complex reading material—and you even need to be considering what the writer of the piece may *not* be including and why. This is why reading for comprehension is recursive.

Specifically, this boils down to seeing reading not as a formula but as a process that is far more circular than linear. You may read a selection from beginning to end, which is an excellent starting point, but for comprehension, you'll need to go back and reread passages to determine meaning and make connections between the reading and the bigger learning environment that led you to the selection—that may be a single course or a program in your college, or it may be the larger discipline, such as all biologists or the community of scholars studying beach erosion.

People often say writing is rewriting. For college courses, reading is rereading, but rereading with the intention of improving comprehension and taking notes.

Strong readers engage in numerous steps, sometimes combining more than one step simultaneously, but knowing the steps nonetheless. They include, not always in this order:

- bringing any prior knowledge about the topic to the reading session,
- asking yourself pertinent questions, both orally and in writing, about the content you are reading,
- inferring and/or implying information from what you read,
- learning unfamiliar discipline-specific terms,
- evaluating what you are reading, and eventually,
- applying what you're reading to other learning and life situations you encounter.

Let's break these steps into manageable chunks, because you are actually doing quite a lot when you read.
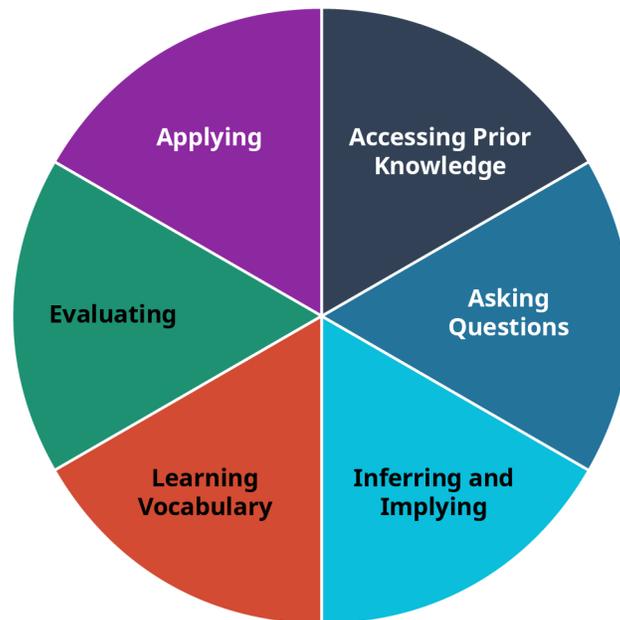
Figure 3.5 The six elements of recursive reading should be considered as a circular, not linear, process.

Accessing Prior Knowledge

When you read, you naturally think of anything else you may know about the topic, but when you read deliberately and actively, you make yourself more aware of accessing this prior knowledge. Have you ever watched a documentary about this topic? Did you study some aspect of it in another class? Do you have a hobby that is somehow connected to this material? All of this thinking will help you make sense of what you are reading.

APPLICATION ✔

Imagine that you were given a chapter to read in your American history class about the Gettysburg Address, now write down what you already know about this historic document. How might thinking through this prior knowledge help you better understand the text?

Asking Questions

Humans are naturally curious beings. As you read actively, you should be asking questions about the topic you are reading. Don't just say the questions in your mind; write them down. You may ask: Why is this topic important? What is the relevance of this topic currently? Was this topic important a long time ago but irrelevant now? Why did my professor assign this reading?

You need a place where you can actually write down these questions; a separate page in your notes is a good place to begin. If you are taking notes on your computer, start a new document and write down the questions. Leave some room to answer the questions when you begin and again after you read.

Inferring and Implying

When you read, you can take the information on the page and *infer*, or conclude responses to related challenges from evidence or from your own reasoning. A student will likely be able to infer what material the professor will include on an exam by taking good notes throughout the classes leading up to the test.

Writers may *imply* information without directly stating a fact for a variety of reasons. Sometimes a writer may not want to come out explicitly and state a bias, but may imply or hint at his or her preference for one political party or another. You have to read carefully to find implications because they are indirect, but watching for them will help you comprehend the whole meaning of a passage.

Learning Vocabulary

Vocabulary specific to certain disciplines helps practitioners in that field engage and communicate with each other. Few people beyond undertakers and archeologists likely use the term *sarcophagus* in everyday communications, but for those disciplines, it is a meaningful distinction. Looking at the example, you can use context clues to figure out the meaning of the term *sarcophagus* because it is something undertakers and/or archeologists would recognize. At the very least, you can guess that it has something to do with death. As a potential professional in the field you're studying, you need to know the lingo. You may already have a system in place to learn discipline-specific vocabulary, so use what you know works for you. Two strong strategies are to look up words in a dictionary (online or hard copy) to ensure you have the exact meaning for your discipline and to keep a dedicated list of words you see often in your reading. You can list the words with a short definition so you have a quick reference guide to help you learn the vocabulary.

Evaluating

Intelligent people always question and evaluate. This doesn't mean they don't trust others; they just need verification of facts to understand a topic well. It doesn't make sense to learn incomplete or incorrect information about a subject just because you didn't take the time to evaluate all the sources at your disposal. When early explorers were afraid to sail the world for fear of falling off the edge, they weren't stupid; they just didn't have all the necessary data to evaluate the situation.

When you evaluate a text, you are seeking to understand the presented topic. Depending on how long the text is, you will perform a number of steps and repeat many of these steps to evaluate all the elements the author presents. When you evaluate a text, you need to do the following:

- Scan the title and all headings.
- Read through the entire passage fully.
- Question what main point the author is making.
- Decide who the audience is.
- Identify what evidence/support the author uses.
- Consider if the author presents a balanced perspective on the main point.
- Recognize if the author introduced any biases in the text.

When you go through a text looking for each of these elements, you need to go beyond just answering the surface question; for instance, the audience may be a specific field of scientists, but could anyone else understand the text with some explanation? Why would that be important?

ANALYSIS QUESTION

Think of an article you need to read for a class. Take the steps above on how to evaluate a text, and apply the steps to the article. When you accomplish the task in each step, ask yourself and take notes to answer the question: Why is this important? For example, when you read the title, does that give you any additional information that will help you comprehend the text? If the text were written for a different audience, what might the author need to change to accommodate that group? How does an author's bias distort an argument? This deep evaluation allows you to fully understand the main ideas and place the text in context with other material on the same subject, with current events, and within the discipline.

Applying

When you learn something new, it always connects to other knowledge you already have. One challenge we have is applying new information. It may be interesting to know the distance to the moon, but how do we apply it to something we need to do? If your biology instructor asked you to list several challenges of colonizing Mars and you do not know much about that planet's exploration, you may be able to use your knowledge of how far Earth is from the moon to apply it to the new task. You may have to read several other texts in addition to reading graphs and charts to find this information.

That was the challenge the early space explorers faced along with myriad unknowns before space travel was a more regular occurrence. They had to take what they already knew and could study and read about and apply it to an unknown situation. These explorers wrote down their challenges, failures, and successes, and now scientists read those texts as a part of the ever-growing body of text about space travel. Application is a sophisticated level of thinking that helps turn theory into practice and challenges into successes.

Preparing to Read for Specific Disciplines in College

Different disciplines in college may have specific expectations, but you can depend on all subjects asking you to read to some degree. In this college reading requirement, you can succeed by learning to read actively, researching the topic and author, and recognizing how your own preconceived notions affect your reading. Reading for college isn't the same as reading for pleasure or even just reading to learn something on your own because you are casually interested.

In college courses, your instructor may ask you to read articles, chapters, books, or *primary sources* (those original documents about which we write and study, such as letters between historic figures or the Declaration of Independence). Your instructor may want you to have a general background on a topic before you dive into that subject in class, so that you know the history of a topic, can start thinking about it, and can engage in a class discussion with more than a passing knowledge of the issue.

If you are about to participate in an in-depth six-week consideration of the U.S. Constitution but have never read it or anything written about it, you will have a hard time looking at anything in detail or understanding how and why it is significant. As you can imagine, a great deal has been written about the Constitution by scholars and citizens since the late 1700s when it was first put to paper (that's how they did it then). While the actual document isn't that long (about 12–15 pages depending on how it is presented), learning the details on how it came about, who was involved, and why it was and still is a significant document would take a considerable amount of time to read and digest. So, how do you do it all? Especially when you may have an instructor who drops hints that you may also *love* to read a historic novel covering the same time period . . . in your *spare time*, not required, of course! It can be daunting, especially if you are taking more than one course that has time-consuming reading lists. With a few strategic techniques, you can manage it all, but know that you must have a plan and schedule your required reading so you *are* also able to pick up that recommended historic novel—it may give you an entirely new perspective on the issue.

Strategies for Reading in College Disciplines

No universal law exists for how much reading instructors and institutions expect college students to undertake for various disciplines. Suffice it to say, it's a LOT.

For most students, it is the volume of reading that catches them most off guard when they begin their college careers. A full course load might require 10–15 hours of reading per week, some of that covering content that will be more difficult than the reading for other courses.

You cannot possibly read word-for-word every single document you need to read for all your classes. That doesn't mean you give up or decide to only read for your favorite classes or concoct a scheme to read 17 percent for each class and see how that works for you. You need to learn to skim, annotate, and take notes. All of these techniques will help you comprehend more of what you read, which is why we read in the first place. We'll talk more later about annotating and note-taking, but for now consider what you know about skimming as opposed to active reading.

Skimming

Skimming is not just glancing over the words on a page (or screen) to see if any of it sticks. Effective skimming allows you to take in the major points of a passage without the need for a time-consuming reading session that involves your active use of notations and annotations. Often you will need to engage in that painstaking level of active reading, but skimming is the first step—not an alternative to deep reading. The fact remains that neither do you need to read everything nor could you possibly accomplish that given your limited time. So learn this valuable skill of skimming as an accompaniment to your overall study tool kit, and with practice and experience, you will fully understand how valuable it is.

When you skim, look for guides to your understanding: headings, definitions, pull quotes, tables, and context clues. Textbooks are often helpful for skimming—they may already have made some of these skimming guides in bold or a different color, and chapters often follow a predictable outline. Some even provide an overview and summary for sections or chapters. Use whatever you can get, but don't stop there. In textbooks that have some reading guides, or especially in texts that do not, look for introductory words such as *First* or *The purpose of this article* . . . or summary words such as *In conclusion* . . . or *Finally*. These guides will help you read only those sentences or paragraphs that will give you the overall meaning or gist of a passage or book.

Now move to the meat of the passage. You want to take in the reading as a whole. For a book, look at the titles of each chapter if available. Read each chapter's introductory paragraph and determine why the writer chose this particular order. Depending on what you're reading, the chapters may be only informational, but often you're looking for a specific argument. What position is the writer claiming? What support, counterarguments, and conclusions is the writer presenting?

Don't think of skimming as a way to buzz through a boring reading assignment. It is a skill you should master so you can engage, at various levels, with all the reading you need to accomplish in college. End your skimming session with a few notes—terms to look up, questions you still have, and an overall summary. And recognize that you likely will return to that book or article for a more thorough reading if the material is useful.

Active Reading Strategies

Active reading differs significantly from skimming or reading for pleasure. You can think of active reading as a sort of conversation between you and the text (maybe between you and the author, but you don't want to get the author's personality too involved in this metaphor because that may skew your engagement with the text).

When you sit down to determine what your different classes expect you to read and you create a reading schedule to ensure you complete all the reading, think about when you should read the material strategically, not just how to *get it all done*. You should read textbook chapters and other reading assignments *before* you go into a lecture about that information. Don't wait to see how the lecture goes before you read the material, or you may not understand the information in the lecture. Reading before class helps you put ideas together

between your reading and the information you hear and discuss in class.

Different disciplines naturally have different types of texts, and you need to take this into account when you schedule your time for reading class material. For example, you may look at a poem for your world literature class and assume that it will not take you long to read because it is relatively short compared to the dense textbook you have for your economics class. But reading and understanding a poem can take a considerable amount of time when you realize you may need to stop numerous times to review the separate word meanings and how the words form images and connections throughout the poem.

The SQ3R Reading Strategy

You may have heard of the **SQ3R** method for active reading in your early education. This valuable technique is perfect for college reading. The title stands for **S**urvey, **Q**uestion, **R**ead, **R**ecite, **R**eview, and you can use the steps on virtually any assigned passage. Designed by Francis Pleasant Robinson in his 1961 book *Effective Study,* the active reading strategy gives readers a systematic way to work through any reading material.

Survey is similar to skimming. You look for clues to meaning by reading the titles, headings, introductions, summary, captions for graphics, and keywords. You can survey almost anything connected to the reading selection, including the copyright information, the date of the journal article, or the names and qualifications of the author(s). In this step, you decide what the general meaning is for the reading selection.

Question is your creation of questions to seek the main ideas, support, examples, and conclusions of the reading selection. Ask yourself these questions separately. Try to create valid questions about what you are about to read that have come into your mind as you engaged in the Survey step. Try turning the headings of the sections in the chapter into questions. Next, how does what you're reading relate to you, your school, your community, and the world?

Read is when you actually read the passage. Try to find the answers to questions you developed in the previous step. Decide how much you are reading in chunks, either by paragraph for more complex readings or by section or even by an entire chapter. When you finish reading the selection, stop to make notes. Answer the questions by writing a note in the margin or other white space of the text.

You may also carefully underline or highlight text in addition to your notes. Use caution here that you don't try to rush this step by haphazardly circling terms or the other extreme of underlining huge chunks of text. Don't over-mark. You aren't likely to remember what these cryptic marks mean later when you come back to use this active reading session to study. The text is the source of information—your marks and notes are just a way to organize and make sense of that information.

Recite means to speak out loud. By reciting, you are engaging other senses to remember the material—you read it (visual) and you said it (auditory). Stop reading momentarily in the step to answer your questions or clarify confusing sentences or paragraphs. You can recite a summary of what the text means to you. If you are not in a place where you can verbalize, such as a library or classroom, you can accomplish this step adequately by *saying* it in your head; however, to get the biggest bang for your buck, try to find a place where you can speak aloud. You may even want to try explaining the content to a friend.

Review is a recap. Go back over what you read and add more notes, ensuring you have captured the main points of the passage, identified the supporting evidence and examples, and understood the overall meaning. You may need to repeat some or all of the SQR3 steps during your review depending on the length and complexity of the material. Before you end your active reading session, write a short (no more than one page is optimal) summary of the text you read.

Reading Primary and Secondary Sources

Primary sources are original documents we study and from which we glean information; primary sources include letters, first editions of books, legal documents, and a variety of other texts. When scholars look at these documents to understand a period in history or a scientific challenge and then write about their

findings, the scholar's article is considered a secondary source. Readers have to keep several factors in mind when reading both primary and secondary sources.

Primary sources may contain dated material we now know is inaccurate. It may contain personal beliefs and biases the original writer didn't intend to be openly published, and it may even present fanciful or creative ideas that do not support current knowledge. Readers can still gain great insight from primary sources, but readers need to understand the context from which the writer of the primary source wrote the text.

Likewise, secondary sources are inevitably another person's perspective on the primary source, so a reader of secondary sources must also be aware of potential biases or preferences the secondary source writer inserts in the writing that may persuade an incautious reader to interpret the primary source in a particular manner.

For example, if you were to read a secondary source that is examining the U.S. Declaration of Independence (the primary source), you would have a much clearer idea of how the secondary source scholar presented the information from the primary source if you also read the Declaration for yourself instead of trusting the other writer's interpretation. Most scholars are honest in writing secondary sources, but you as a reader of the source are trusting the writer to present a balanced perspective of the primary source. When possible, you should attempt to read a primary source in conjunction with the secondary source. The Internet helps immensely with this practice.

Researching Topic and Author

During your preview stage, sometimes called pre-reading, you can easily pick up on information from various sources that may help you understand the material you're reading more fully or place it in context with other important works in the discipline. If your selection is a book, flip it over or turn to the back pages and look for an author's biography or note from the author. See if the book itself contains any other information about the author or the subject matter.

The main things you need to recall from your reading in college are the topics covered and how the information fits into the discipline. You can find these parts throughout the textbook chapter in the form of headings in larger and bold font, summary lists, and important quotations pulled out of the narrative. Use these features as you read to help you determine what the most important ideas are.
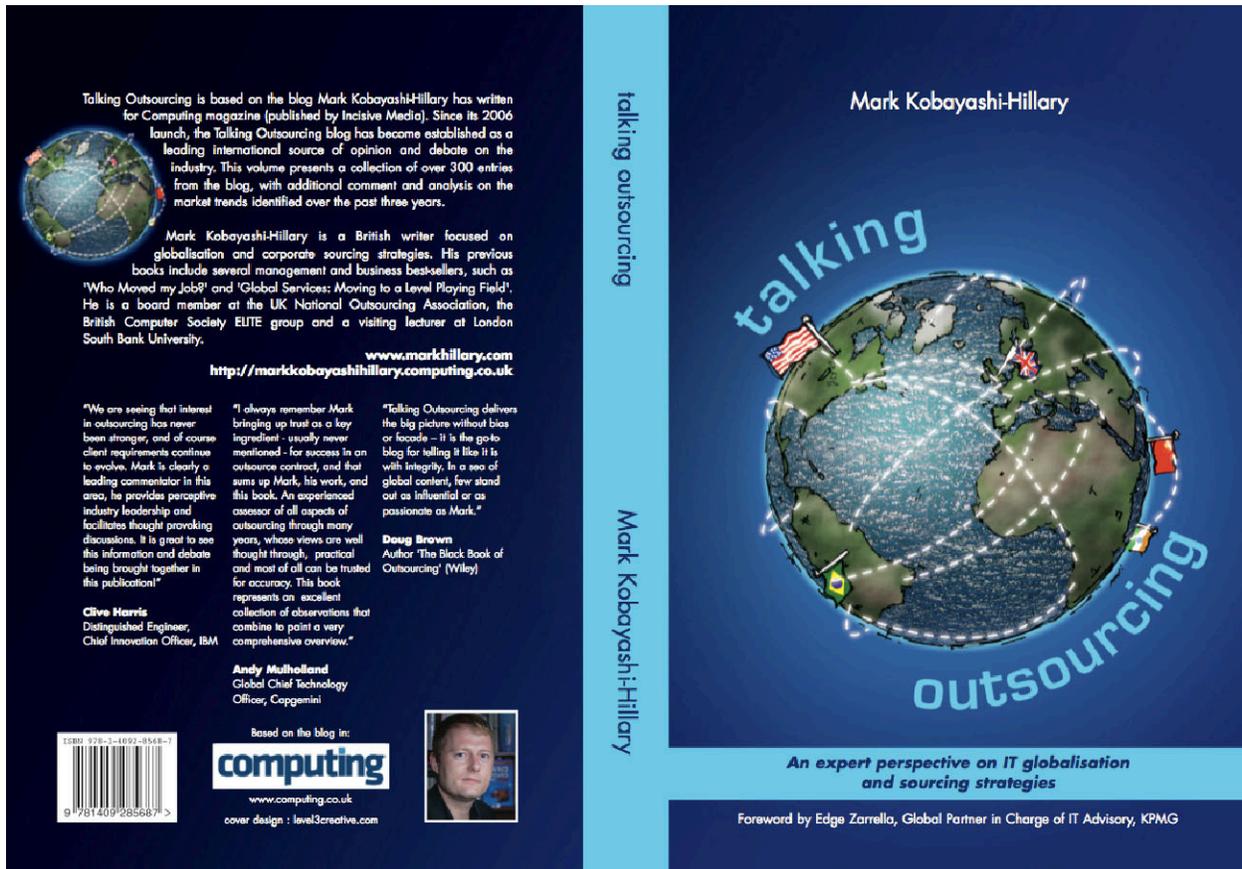
Figure 3.6 Learning about the book you're reading can provide good context and information. Look for an author's biography and forward on the back cover or in the first few pages. (Credit: Mark Hillary / Flickr / Attribution 2.0 Generic (CC-BY 2.0))

Remember, many books use quotations about the book or author as testimonials in a marketing approach to sell more books, so these may not be the most reliable sources of unbiased opinions, but it's a start. Sometimes you can find a list of other books the author has written near the front of a book. Do you recognize any of the other titles? Can you do an Internet search for the name of the book or author? Go beyond the search results that want you to buy the book and see if you can glean any other relevant information about the author or the reading selection. Beyond a standard Internet search, try the library article database. These are more relevant to academic disciplines and contain resources you typically will not find in a standard search engine. If you are unfamiliar with how to use the library database, ask a reference librarian on campus. They are often underused resources that can point you in the right direction.

Understanding Your Own Preset Ideas on a Topic

Consider this scenario: Laura really enjoys learning about environmental issues. She has read many books and watched numerous televised documentaries on this topic and actively seeks out additional information on the environment. While Laura's interest can help her understand a new reading encounter about the environment, Laura also has to be aware that with this interest, she brings forward her preset ideas and biases about the topic. Sometimes these prejudices against other ideas relate to religion or nationality or even just tradition. Without evidence, thinking the way we always have is not a good enough reason; evidence can change, and at the very least it needs honest review and assessment to determine its validity. Ironically, we may not want to learn new ideas because that may mean we would have to give up old ideas we have already mastered, which can be a daunting prospect.

With every reading situation about the environment, Laura needs to remain open-minded about what she is about to read and pay careful attention if she begins to ignore certain parts of the text because of her preconceived notions. Learning new information can be very difficult if you balk at ideas that are different

from what you've always thought. You may have to force yourself to listen to a different viewpoint multiple times to make sure you are not closing your mind to a viable solution your mindset does not currently allow.

ANALYSIS QUESTION

Can you think of times you have struggled reading college content for a course? Which of these strategies might have helped you understand the content? Why do you think those strategies would work?

3.4 | Helpful Note-Taking Strategies

Estimated completion time: 21 minutes.

Questions to Consider:

- How can you prepare to take notes to maximize the effectiveness of the experience?
- What are some specific strategies you can employ for better note-taking?
- Why is annotating your notes after the note-taking session a critical step to follow?

Beyond providing a record of the information you are reading or hearing, notes help you organize the ideas and help you make meaning out of something about which you may not be familiar, so note-taking and reading are two compatible skill sets. Taking notes also helps you stay focused on the question at hand. Taking notes during presentations or class lectures may allow you to follow the speaker's main points and condense the material into a more readily usable format. Strong notes build on your prior knowledge of a subject, help you discuss trends or patterns present in the information, and direct you toward areas needing further research or reading.

Figure 3.7 Strong notes build on your prior knowledge of a subject, help you discuss trends or patterns present in the information, and direct you toward areas needing further research or reading. (Credit: Betsy Weber / Flickr Attribution 2.0 Generic (CC-BY 2.0))

It is not a good habit to transcribe every single word a speaker utters—even if you have an amazing ability to do that. Most of us don't have that court-reporter-esque skill level anyway, and if we try, we would end up missing valuable information. Learn to listen for main ideas and distinguish between these main ideas and details that typically support the ideas. Include examples that explain the main ideas, but do so using

understandable abbreviations.

Think of all notes as potential study guides. In fact, if you only take notes without actively working on them after the initial note-taking session, the likelihood of the notes helping you is slim. Research on this topic concludes that without active engagement after taking notes, most students forget 60–75 percent of material over which they took the notes—within two days! That sort of defeats the purpose, don't you think? This information about memory loss was first brought to light by 19th-century German psychologist Hermann Ebbinghaus. Fortunately, you do have the power to thwart what is sometimes called the Ebbinghaus Forgetting Curve by reinforcing what you learned through review at intervals shortly after you take in the material and frequently thereafter.

If you are a musician, you'll understand this phenomenon well. When you first attempt a difficult piece of music, you may not remember the chords and notes well at all, but after frequent practice and review, you generate a certain muscle memory and cognitive recall that allows you to play the music more easily.

Note-taking may not be the most glamorous aspect of your higher-education journey, but it is a study practice you will carry throughout college and into your professional life. Setting yourself up for successful note-taking is almost as important as the actual taking of notes, and what you do after your note-taking session is equally significant. Well-written notes help you organize your thoughts, enhance your memory, and participate in class discussion, and they prepare you to respond successfully on exams. With all that riding on your notes, it would behoove you to learn how to take notes properly and continue to improve your note-taking skills.

ANALYSIS QUESTION

Do you currently have a preferred way to take notes? When did you start using it? Has it been effective? What other strategy might work for you?

Preparing to Take Notes

Preparing to take notes means more than just getting out your laptop or making sure you bring pen and paper to class. You'll do a much better job with your notes if you understand why we take notes, have a strong grasp on your preferred note-taking system, determine your specific priorities depending on your situation, and engage in some version of efficient shorthand.

Like handwriting and fingerprints, we all have unique and fiercely independent note-taking habits. These understandably and reasonably vary from one situation to the next, but you can only improve your skills by learning more about ways to take effective notes and trying different methods to find a good fit.

The very best notes are the ones you take in an organized manner that encourages frequent review and use as you progress through a topic or course of study. For this reason, you need to develop a way to organize all your notes for each class so they remain together and organized. As old-fashioned as it sounds, a clunky three-ring binder is an excellent organizational container for class notes. You can easily add to previous notes, insert handouts you may receive in class, and maintain a running collection of materials for each separate course. If the idea of carrying around a heavy binder has you rolling your eyes, then transfer that same structure into your computer files. If you don't organize your many documents into some semblance of order on your computer, you will waste significant time searching for improperly named or saved files.

You may be interested in relatively new research on what is the more effective note-taking strategy: handwriting versus typing directly into a computer. While individuals have strong personal opinions on this subject, most researchers agree that the format of student notes is less important than what students do with the notes they take afterwards. Both handwriting notes and using a computer for note-taking have pros and cons.
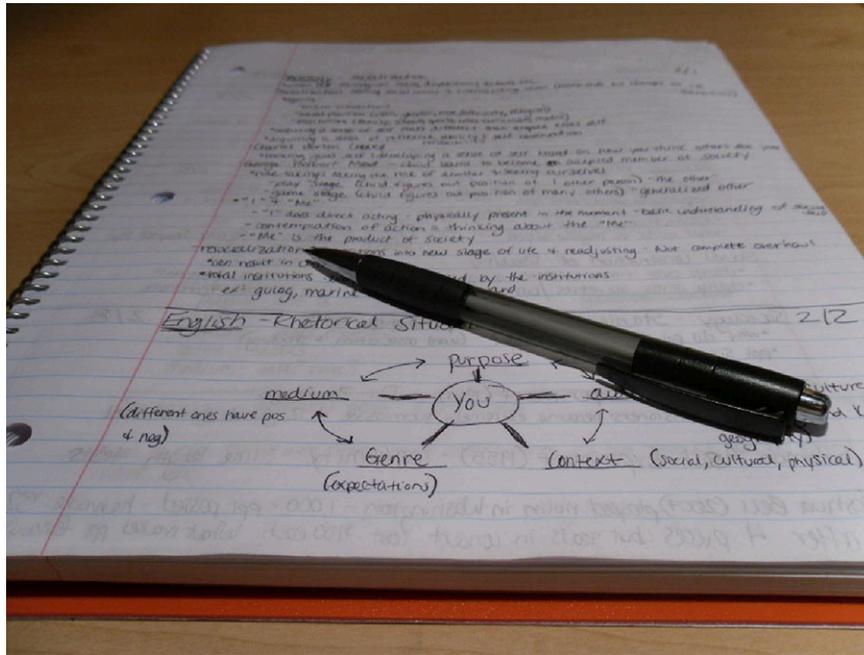
Figure 3.8 The best notes are the ones you take in an organized manner. Frequent review and further annotation are important to build a deep and useful understanding of the material. (Credit: English106 / Flickr / Attribution 2.0 Generic (CC-BY 2.0))

Managing Note-Taking Systems

Whichever of the many note-taking systems you choose (and new ones seem to come out almost daily), the very best one is the one that you will use consistently. The skill and art of note-taking is not automatic for anyone; it takes a great deal of practice, patience, and continuous attention to detail. Add to that the fact that you may need to master multiple note-taking techniques for different classes, and you have some work to do. Unless you are specifically directed by your instructor, you are free to combine the best parts of different systems if you are most comfortable with that hybrid system.

Just to keep yourself organized, all your notes should start off with an identifier, including at the very least the date, the course name, the topic of the lecture/presentation, and any other information you think will help you when you return to use the notes for further study, test preparation, or assignment completion. Additional, optional information may be the number of note-taking sessions about this topic or reminders to cross-reference class handouts, textbook pages, or other course materials. It's also always a good idea to leave some blank space in your notes so you can insert additions and questions you may have as you review the material later.

GET CONNECTED

Staying organized is a challenge when you are juggling multiple assigned readings and lecture notes, but keeping track of what you have read and heard in lecture improves your ability to study the material and retain it. These resources can provide you with opportunities to sharpen your reading and note-taking game.

Evernote (https://openstax.org/l/evernote) provides students with the opportunity to keep track of tasks and assignment due dates. Users can also connect to Google Calendar, share notes with others, and annotate documents. The app allows for you to access your notes on multiple devices.

The Learning Center (https://openstax.org/l/enhancingyourmemory), University of North Carolina at Chapel Hill provides background information on an array of studying and learning techniques, beyond those listed

above. For any that appeal to you or seem to apply to your fields of study, consult other material specifically focused on them.

Note-Taking Strategies

You may have a standard way you take all your notes for all your classes. When you were in high school, this one-size-fits-all approach may have worked. Now that you're in college, reading and studying more advanced topics, your general method may still work some of the time, but you should have some different strategies in place if you find that your method isn't working as well with college content. You probably will need to adopt different note-taking strategies for different subjects. The strategies in this section represent various ways to take notes in such a way that you are able to study after the initial note-taking session.

Cornell Method

One of the most recognizable note-taking systems is called the *Cornell Method*, a relatively simple way to take effective notes devised by Cornell University education professor Dr. Walter Pauk in the 1940s. In this system, you take a standard piece of note paper and divide it into three sections by drawing a horizontal line across your paper about one to two inches from the bottom of the page (the summary area) and then drawing a vertical line to separate the rest of the page above this bottom area, making the left side about two inches (the recall column) and leaving the biggest area to the right of your vertical line (the notes column). You may want to make one page and then copy as many pages as you think you'll need for any particular class, but one advantage of this system is that you can generate the sections quickly. Because you have divided up your page, you may end up using more paper than you would if you were writing on the entire page, but the point is not to keep your notes to as few pages as possible. The Cornell Method provides you with a well-organized set of notes that will help you study and review your notes as you move through the course. If you are taking notes on your computer, you can still use the Cornell Method in Word or Excel on your own or by using a template someone else created.

Topic/Objective:		Name:
		Class/Period:
		Date:
Essential Question:		

Questions:	Notes:

Summary:

Figure 3.9 The Cornell Method provides a straightforward, organized, and flexible approach.

Now that you have the note-taking format generated, the beauty of the Cornell Method is its organized simplicity. Just write on one side of the page (the right-hand notes column)—this will help later when you are reviewing and revising your notes. During your note-taking session, use the notes column to record information over the main points and concepts of the lecture; try to put the ideas into your own words, which will help you to not transcribe the speaker's words verbatim. Skip lines between each idea in this column.

Practice the shortcut abbreviations covered in the next section and avoid writing in complete sentences. Don't make your notes too cryptic, but you can use bullet points or phrases equally well to convey meaning—we do it all the time in conversation. If you know you will need to expand the notes you are taking in class but don't

have time, you can put reminders directly in the notes by adding and underlining the word *expand* by the ideas you need to develop more fully.

As soon as possible after your note-taking session, preferably within eight hours but no more than twenty-four hours, read over your notes column and fill in any details you missed in class, including the places where you indicated you wanted to expand your notes. Then in the recall column, write any key ideas from the corresponding notes column—you can't stuff this smaller recall column as if you're explaining or defining key ideas. Just add the one- or two-word main ideas; these words in the recall column serve as cues to help you remember the detailed information you recorded in the notes column.

Once you are satisfied with your notes and recall columns, summarize this page of notes in two or three sentences using the summary area at the bottom of the sheet. This is an excellent time to get with another classmate or a group of students who all heard the same lecture to make sure you all understood the key points. Now, before you move onto something else, cover the large notes column, and quiz yourself over the key ideas you recorded in the recall column. Repeat this step often as you go along, not just immediately before an exam, and you will help your memory make the connections between your notes, your textbook reading, your in-class work, and assignments that you need to succeed on any quizzes and exams.

Academic Essay Elements	
Topic	**Topic** – Establishes context – Limits scope of essay – Introduces Issue/Problem
Thesis	**Thesis** – Central argument or point of paper – Arrives early in paper—usually toward end of first paragraph (maybe a bit later in longer papers) – Focused, clear, and specific – Reflects writer's position on the topic/issue
Supporting Details	**Supporting Detail Paragraphs** – Each paragraph has a specific topic – Clarify, explain, illustrate, expand on topic – Provide EVIDENCE—quotes, data, references Cite everything properly!
Conclusion	**Conclusion** – Tie back to intro/thesis – Show how details supported the argument – Why is it important? – Point to implications/outcomes, but don't introduce entirely new ideas
Use the structure, but don't follow it too rigidly. The most important pieces are a strong thesis and good evidence to back it up. The conclusion should not just summarize—take it a little further.	

Figure 3.10 This sample set of notes in the Cornell Method is designed to make sense of a large amount of information. The process of organizing the notes can help you retain the information more effectively than less consistent methods.

The main advantage of the Cornell Method is that you are setting yourself up to have organized, workable notes. The neat format helps you move into study-mode without needing to re-copy less organized notes or making sense of a large mass of information you aren't sure how to process because you can't remember key ideas or what you meant. If you write notes in your classes without any sort of system and later come across something like "Napoleon—short" in the middle of a glob of notes, what can you do at this point? Is that important? Did it connect with something relevant from the lecture? How would you possibly know? You are your best advocate for setting yourself up for success in college.

Outlining

Other note organizing systems may help you in different disciplines. You can take notes in a formal outline if you prefer, using Roman numerals for each new topic, moving down a line to capital letters indented a few spaces to the right for concepts related to the previous topic, then adding details to support the concepts indented a few more spaces over and denoted by an Arabic numeral. You can continue to add to a formal outline by following these rules.

You don't absolutely have to use the formal numerals and letter, but you have to then be careful to indent so you can tell when you move from a higher level topic to the related concepts and then to the supporting information. The main benefit of an outline is how organized it is. You have to be on your toes when you are taking notes in class to ensure you keep up the organizational format of the outline, which can be tricky if the lecture or presentation is moving quickly or covering many diverse topics.

The following formal outline example shows the basic pattern:

I. Dogs *(main topic–usually general)*
   A. German Shepherd *(concept related to main topic)*
      1. Protection *(supporting info about the concept)*
      2. Assertive
      3. Loyal

   B. Weimaraner *(concept related to main topic)*
      1. Family-friendly *(supporting info about the concept)*
      2. Active
      3. Healthy

II. Cats *(main topic)*
    Siamese

You would just continue on with this sort of numbering and indenting format to show the connections between main ideas, concepts, and supporting details. Whatever details you do not capture in your note-taking session, you can add after the lecture as you review your outline.

Chart or Table

Similar to creating an outline, you can develop a chart to compare and contrast main ideas in a note-taking session. Divide your paper into four or five columns with headings that include either the main topics covered in the lecture or categories such as How?, What?, When used?, Advantages/Pros, Disadvantages/Cons, or other divisions of the information. You write your notes into the appropriate columns as that information comes to light in the presentation. The table below provides an example of a table that can help you organize topics in a science course.

	Structure	Types	Functions in Body	Additional Notes
Carbohydrates				
Lipids				
Proteins				
Nucleic Acid				

Table 3.3 Example of a Chart to Organize Ideas and Categories

This format helps you pull out the salient ideas and establishes an organized set of notes to study later. (If you haven't noticed that this *reviewing later* idea is a constant across all note-taking systems, you should take note of that.) Notes by themselves that you never reference again are little more than scribblings. That would be a bit like compiling an extensive grocery list so you stay on budget when you shop, work all week on it, and then just throw it away before you get to the store. You may be able to recall a few items, but likely won't be as efficient as you could be if you had the notes to reference. Just as you cannot read all the many books, articles, and documents you need to peruse for your college classes, you cannot remember the most important ideas of all the notes you will take as part of your courses, so you must review.

Concept Mapping and Visual Note-taking

One final note-taking method that appeals to learners who prefer a visual representation of notes is called *mapping* or sometimes *mind mapping* or *concept mapping,* although each of these names can have slightly different uses. Variations of this method abound, so you may want to look for more versions online, but the basic principles are that you are making connections between main ideas through a graphic depiction; some can get rather elaborate with colors and shapes, but a simple version may be more useful at least to begin. Main ideas can be circled or placed in a box with supporting concepts radiating off these ideas shown with a connecting line and possibly details of the support further radiating off the concepts. You can present your main ideas vertically or horizontally, but turning your paper long-ways, or in landscape mode, may prove helpful as you add more main ideas.

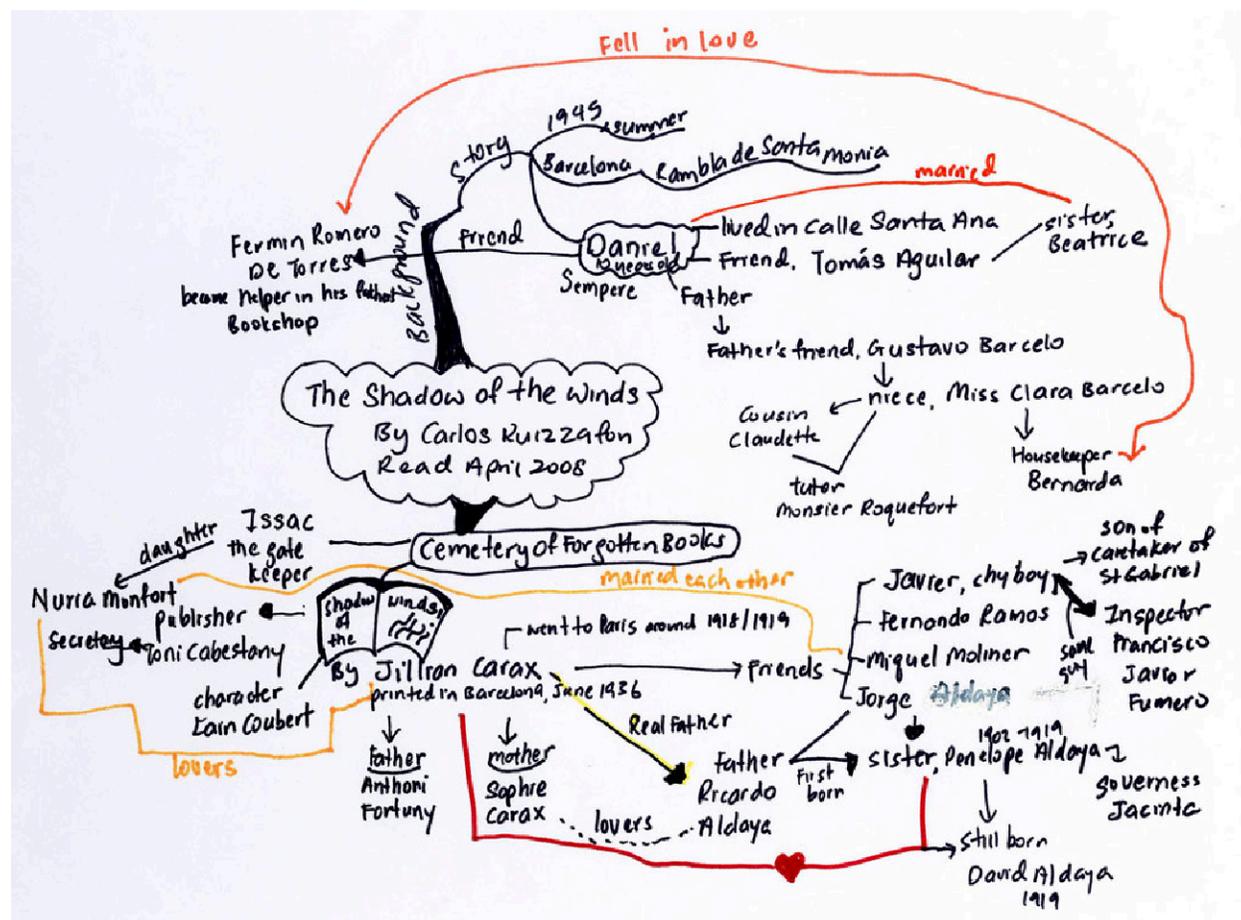**Figure 3.11** Concept mapping, sometimes referred to as mind mapping, can be an effective and very personalized approach to capturing information. (Credit: ArtistIvanChew / Flickr / Attribution 2.0 Generic (CC-BY 2.0))

You may be interested in trying visual note-taking or adding pictures to your notes for clarity. Sometimes when you can't come up with the exact wording to explain something or you're trying to add information for

complex ideas in your notes, sketching a rough image of the idea can help you remember. According to educator Sherrill Knezel in an article entitled "The Power of Visual Note-taking," this strategy is effective because "When students use images and text in note-taking, it gives them two different ways to pull up the information, doubling their chances of recall." Don't shy away from this creative approach to note-taking just because you believe you aren't an artist; the images don't need to be perfect. You may want to watch Rachel Smith's TEDx Talk called "Drawing in Class" (https://openstax.org/l/drawinginclass) to learn more about visual note-taking.

You can play with different types of note-taking suggestions and find the method(s) you like best, but once you find what works for you, stick with it. You will become more efficient with the method the more you use it, and your note-taking, review, and test prep will become, if not easier, certainly more organized, which can decrease your anxiety.

Practicing Decipherable Shorthand

Most college students don't take a class in shorthand, once the domain of secretaries and executive assistants, but maybe they should. That almost-lost art in the age of computers could come in very handy during intense note-taking sessions. Elaborate shorthand systems do exist, but you would be better served in your college note-taking adventures to hone a more familiar, personalized form of shorthand to help you write more in a shorter amount of time. Seemingly insignificant shortcuts can add up to ease the stress note-taking can induce—especially if you ever encounter an "I'm not going to repeat this" kind of presenter! Become familiar with these useful abbreviations:

Shortcut symbol	Meaning
w/, w/o, w/in	with, without, within
&	and
#	number
b/c	because
X, √	incorrect, correct
Diff	different, difference
etc.	and so on
ASAP	as soon as possible
US, UK	United States, United Kingdom
info	information
Measurements: ft, in, k, m	foot, inch, thousand, million
¶	paragraph or new paragraph
Math symbols: =, +, >, <, ÷	equal, plus, greater, less, divided by

Table 3.4

Shortcut symbol	Meaning
WWI, WWII	World Wars I and II
impt	important
?, !, **	denote something is very significant; don't over use

Table 3.4

See the table above for examples of common shorthand symbols and abbreviations. Do you have any other shortcuts or symbols that you use in your notes? Ask your parents if they remember any that you may be able to learn.

Annotating Notes After the Initial Note-Taking Session

Annotating notes after the initial note-taking session may be one of the most valuable study skills you can master. Whether you are highlighting, underlining, or adding additional notes, you are reinforcing the material in your mind and memory.

Admit it—who can resist highlighting markers? Gone are the days when yellow was the star of the show, and you had to be very careful not to press too firmly for fear of obliterating the words you were attempting to emphasize. Students now have a veritable rainbow of highlighting options and can color-code notes and text passages to their hearts' content.

The only reason to highlight anything is to draw attention to it, so you can easily pick out that ever-so-important information later for further study or reflection. One problem many students have is not knowing when to stop. If what you need to recall from the passage is a particularly apt and succinct definition of the term important to your discipline, highlighting the entire paragraph is less effective than highlighting just the actual term. And if you don't rein in this tendency to color long passages (possibly in multiple colors) you can end up with a whole page of highlighted text. Ironically, that is no different from a page that is not highlighted at all, so you have wasted your time. Your mantra for highlighting text should be *less is more*. Always read your text selection first before you start highlighting anything. You need to know what the overall message is before you start placing emphasis in the text with highlighting.

Another way to annotate notes after initial note-taking is underlining significant words or passages. Albeit not quite as much fun as its colorful cousin highlighting, underlining provides precision to your emphasis.

Some people think of annotations as only using a colored highlighter to mark certain words or phrases for emphasis. Actually, annotations can refer to anything you do with a text to enhance it for your particular use (either a printed text, handwritten notes, or other sort of document you are using to learn concepts). The annotations may include highlighting passages or vocabulary, defining those unfamiliar terms once you look them up, writing questions in the margin of a book, underlining or circling key terms, or otherwise marking a text for future reference. You can also annotate some electronic texts.

Realistically, you may end up doing all of these types of annotations at different times. We know that repetition in studying and reviewing is critical to learning, so you may come back to the same passage and annotate it separately. These various markings can be invaluable to you as a study guide and as a way to see the evolution of your learning about a topic. If you regularly begin a reading session writing down any questions you may have about the topic of that chapter or section and also write out answers to those questions at the end of the reading selection, you will have a good start to what that chapter covered when you eventually need to study for an exam. At that point, you likely will not have time to reread the entire selection especially if it is a long reading selection, but with strong annotations in conjunction with your class notes, you won't need to do that.

With experience in reading discipline-specific texts and writing essays or taking exams in that field, you will know better what sort of questions to ask in your annotations.

Figure 3.12 Annotations may include highlighting important topics, defining unfamiliar terms, writing questions in, underlining or circling key terms, or otherwise marking a text for future reference. Whichever approach you choose, try not to overdo it; neat, organized, and efficient notes are more effective than crowded or overdone notes.
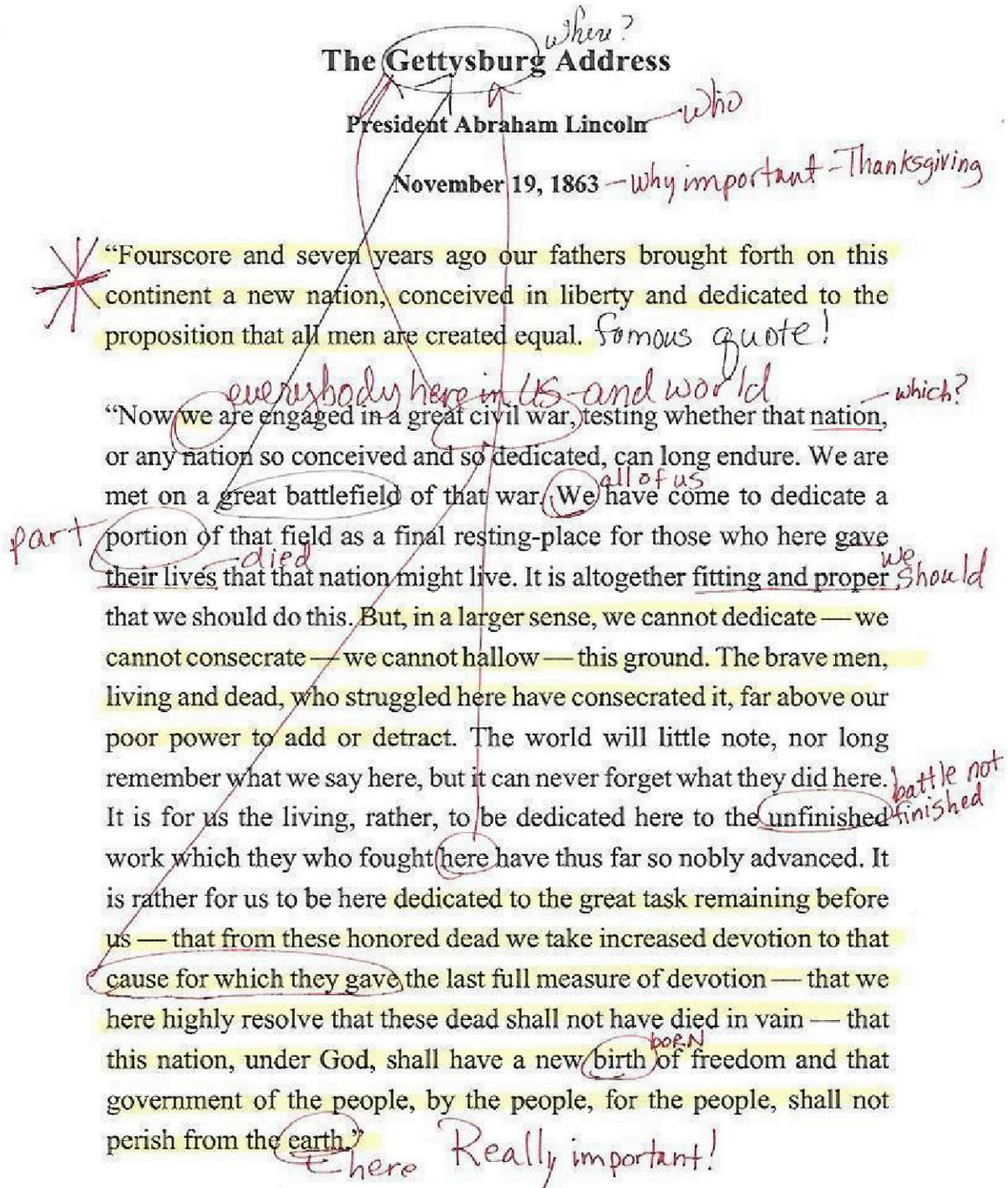
Figure 3.13 While these notes may be meaningful to the person who took them, they are neither organized nor consistent. For example, note that some of the more commonly used terms, like "we" and "unfinished," are defined, but less common ones -- "consecrate" and "hallow" -- are not.

What you have to keep in the front of your mind while you are annotating, especially if you are going to conduct multiple annotation sessions, is to not overdo whatever method you use. Be judicious about what you annotate and how you do it on the page, which means you must be neat about it. Otherwise, you end up with a mess of either color or symbols combined with some cryptic notes that probably took you quite a long time to create, but won't be worth as much to you as a study aid as they could be. This is simply a waste of time and effort.

You cannot eat up every smidgen of white space on the page writing out questions or summaries and still have a way to read the original text. If you are lucky enough to have a blank page next to the beginning of the chapter or section you are annotating, use this, but keep in mind that when you start writing notes, you aren't exactly sure how much space you'll need. Use a decipherable shorthand and write only what you need to convey the meaning in very small print. If you are annotating your own notes, you can make a habit of using only one side of the paper in class, so that if you need to add more notes later, you could use the other side. You can also add a blank page to your notes before beginning the next class date in your notebook so you'll end up with extra paper for annotations when you study.

Professional resources may come with annotations that can be helpful to you as you work through the various documentation requirements you'll encounter in college as well. Purdue University's Online Writing Lab (OWL (https://openstax.org/l/mlaformatting)) provides an annotated sample for how to format a college paper according to guidelines in the Modern Language Association (MLA) manual that you can see, along with other annotations.

Providing Needed Additional Explanations to Notes

Consider this scenario: Marlon was totally organized and ready to take notes in a designated course notebook at the beginning of every philosophy class session. He always dated his page and indicated what the topic of discussion was. He had various colored highlighters ready to denote the different note purposes he had defined: vocabulary in pink, confusing concepts in green, and note sections that would need additional explanations later in yellow. He also used his own shorthand and an impressive array of symbols to indicate questions (red question mark), highly probable test material (he used a tiny bomb exploding here), additional reading suggestions, and specific topics he would ask his instructor before the next class. Doing everything so precisely, Marlon's methods seemed like a perfect example of how to take notes for success. Inevitably though, by the end of the hour-and-a-half class session, Marlon was frantically switching between writing tools, near to tears, and scouring his notes as waves of yellow teased him with uncertainty. What went wrong?

As with many of us who try diligently to do everything we know how to do for success or what we think we know because we read books and articles on success in between our course work, Marlon is suffering from trying to do too much simultaneously. It's an honest mistake we can make when we are trying to save a little time or think we can multitask and kill two birds with one stone.

Unfortunately, this particular error in judgment can add to your stress level exponentially if you don't step back and see it for what it is. Marlon attempted to take notes in class as well as annotate his notes to get them ready for his test preparation. It was too much to do at one time, but even if he could have done all those things during class, he's missing one critical point about note-taking.

As much as we may want to hurry and get it over with, note-taking in class is just the beginning. Your instructor likely gave you a pre-class assignment to read or complete before coming to that session. The intention of that preparatory lesson is for you to come in with some level of familiarity for the topic under consideration and questions of your own. Once you're in class, you may also need to participate in a group discussion, work with your classmates, or perform some other sort of lesson-directed activity that would necessarily take you away from taking notes. Does that mean you should ignore taking notes for that day? Most likely not. You may just need to indicate in your notes that you worked on a project or whatever other in-class event you experienced that date.

Very rarely in a college classroom will you engage in an activity that is not directly related to what you are studying in that course. Even if you enjoyed every minute of the class session and it was an unusual format for that course, you still need to take some notes. Maybe your first note could be to ask yourself why you think the instructor used that unique teaching strategy for the class that day. Was it effective? Was it worth using the whole class time? How will that experience enhance what you are learning in that course?

If you use an ereader or ebooks to read texts for class or read articles from the Internet on your laptop or

tablet, you can still take effective notes. Depending on the features of your device, you have many choices. Almost all electronic reading platforms allow readers to highlight and underline text. Some devices allow you to add a written text in addition to marking a word or passage that you can collect at the end of your note-taking session. Look into the specific tools for your device and learn how to use the features that allow you to take notes electronically. You can also find apps on devices to help with taking notes, some of which you may automatically have installed when you buy the product. Microsoft's OneNote, Google Keep, and the Notes feature on phones are relatively easy to use, and you may already have free access to those.

Taking Notes on Non-Text Items (i.e., Tables, Maps, Figures, etc.)

You may also encounter situations as you study and read textbooks, primary sources, and other resources for your classes that are not actually texts. You can still take notes on maps, charts, graphs, images, and tables, and your approach to these non-text features is similar to when you prepare to take notes over a passage of text. For example, if you are looking at the following map, you may immediately come up with several questions. Or it may initially appear overwhelming. Start by asking yourself these questions:

What is the main point of this map?
- Who is the intended audience?
- Where is it?
- What time period does it depict?
- What does the map's legend (the explanation of symbols) include?
- What other information do I need to make sense of this map?
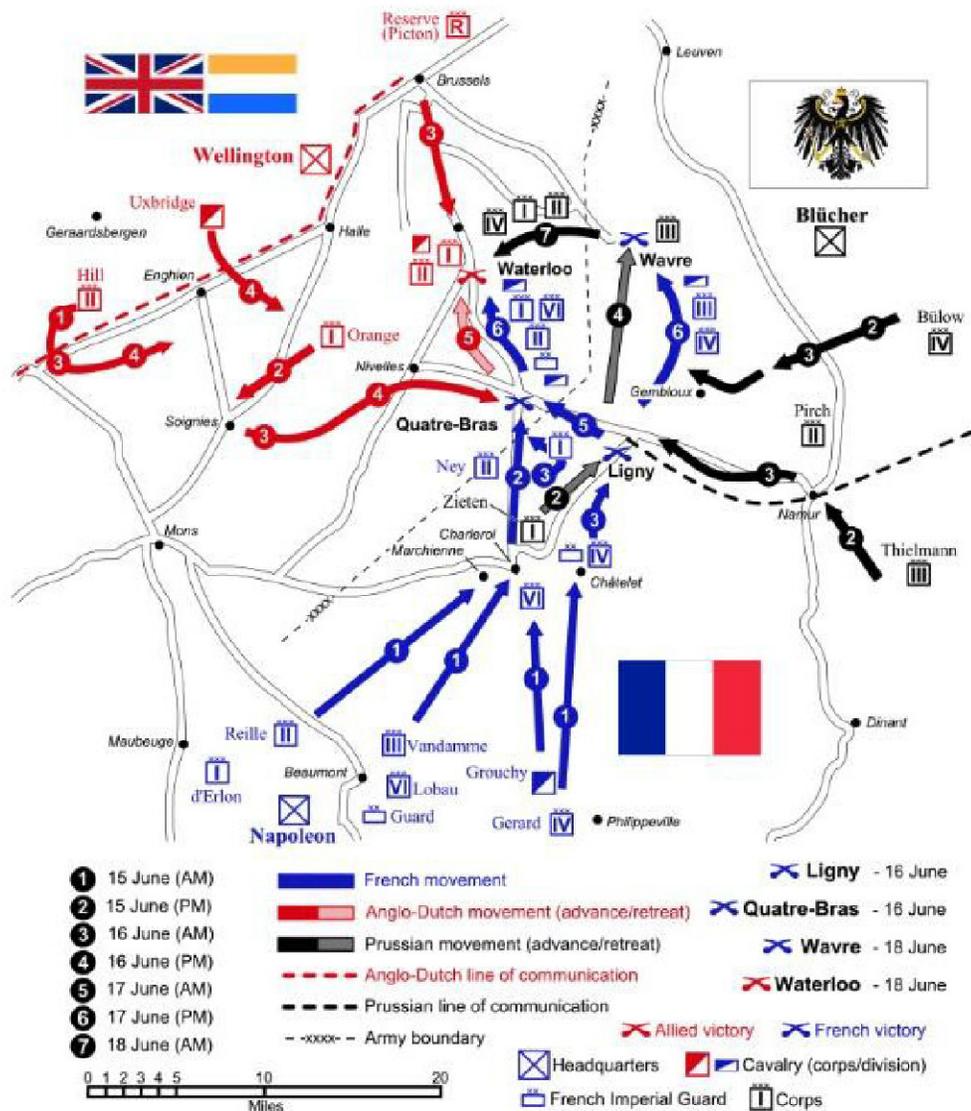
Figure 3.14 Graphics, charts, graphs, and other visual items are also important to annotate. Not only do they often convey important information, but they may appear on exams or in other situations where you'll need to use or demonstrate knowledge. (Credit: "Lpankonin" / Wikipedia Commons / Attribution 3.0 Generic (CC BY 3.0))

You may want to make an extra copy of a graphic or table before you add annotations if you are dealing with a lot of information. Making sense of all the elements will take time, and you don't want to add to the confusion.

Returning to Your Notes

Later, as soon as possible after the class, you can go back to your notes and add in missing parts. Just as you may generate questions as you're reading new material, you may leave a class session or lecture or activities with many questions. Write those down in a place where they won't get lost in all your other notes.

The exact timing of when you get back to the notes you take in class or while you are reading an assignment will vary depending on how many other classes you have or what other obligations you have in your daily

schedule. A good starting place that is also easy to remember is to make every effort to review your notes within 24 hours of first taking them. Longer than that and you are likely to have forgotten some key features you need to include; must less time than that, and you may not think you need to review the information you so recently wrote down, and you may postpone the task too long.

Use your phone or computer to set reminders for all your note review sessions so that it becomes a habit and you keep on top of the schedule.

Your personal notes play a significant role in your test preparation. They should enhance how you understand the lessons, textbooks, lab sessions, and assignments. All the time and effort you put into first taking the notes and then annotating and organizing the notes will be for naught if you do not formulate an effective and efficient way to use them before sectional exams or comprehensive tests.

The whole cycle of reading, note-taking in class, reviewing and enhancing your notes, and preparing for exams is part of a continuum you ideally will carry into your professional life. Don't try to take short cuts; recognize each step in the cycle as a building block. Learning doesn't end, which shouldn't fill you with dread; it should help you recognize that all this work you're doing in the classroom and during your own study and review sessions is ongoing and cumulative. Practicing effective strategies now will help you be a stronger professional.

ACTIVITY

What resources can you find about reading and note-taking that will actually help you with these crucial skills? How do you go about deciding what resources are valuable for improving your reading and note-taking skills?

The selection and relative value of study guides and books about note-taking vary dramatically. Ask your instructors for recommendations and see what the library has available on this topic. The following list is not comprehensive, but will give you a starting point for books and articles on note-taking in college.

- ***College Rules!: How to Study, Survive, and Succeed in College,*** by Sherri Nist-Olejnik and Jodi Patrick Holschuh. More than just note-taking, this book covers many aspects of transitioning into the rigors of college life and studying.
- ***Effective Note-taking,*** by Fiona McPherson. This small volume has suggestions for using your limited time wisely before, during, and after note-taking sessions.
- ***How to Study in College,*** by Walter Pauk. This is the book that introduced Pauk's note-taking suggestions we now call the Cornell Method. It is a bit dated (from the 1940s), but still contains some valuable information.
- ***Learn to Listen, Listen to Learn 2: Academic Listening and Note-taking,*** by Roni S. Lebauer. The main point of this book is to help students get the most from college lectures by watching for clues to lecture organization and adapting this information into strong notes.
- ***Study Skills: Do I Really Need this Stuff?*** by Steve Piscitelli. Written in a consistently down-to-earth manner, this book will help you with the foundations of strong study skills, including time management, effective note-taking, and seeing the big picture.
- **"What Reading Does for the Mind"**, by Anne Cunningham and Keith Stanovich, 1998, https://www.aft.org/sites/default/files/periodicals/cunningham.pdf (https://openstax.org/l/periodicalscunningham)
- ***How to Read a Book: The Classic Guide to Intelligent Reading,*** by Mortimer J. Adler and Charles Van Doren, 1940.
- ***Short- and Long-Term Effects of a Novel on Connectivity in the Brain,*** by Gregory S. Berns, Kristina Blaine, Michael J. Prietula, and Brandon E. Pye. http://doi.org/10.1089/brain.2013.0166 (https://openstax.org/l/connectivityinthebrain)

🗐 Summary

Reading and note-taking are part of the foundation of college studying and learning. The expectation in college is that you read considerable amounts of text for each subject with the goal of learning more about the subjects. You may encounter reading situations, such as professional journal articles and long textbook chapters, that are more difficult to understand than texts you have read previously. As you progress through your college courses, you can employ reading strategies to help you complete your college reading assignments. Likewise, you will take notes in college that need to be complete so you can study and recall the information you learn in lectures and lab sessions. With so much significant information that you need to collect, study, and recall for your college courses, you need to be deliberate in your reading and note-taking.

Honing these fundamental skills can only help you succeed in college and beyond because you will need to be able to take in and recall a vast amount of information. To that end, consider what else about reading and note-taking you would like to learn or practice. Choose one of the following to explore further this term:

- Develop more curiosity about what you are reading by creating questions about what you will learn or how you will use the information. Look for articles, blog posts, podcasts, books, and films about what you are learning to help you develop more knowledge.
- Explore the best reading strategy for your most challenging courses. Choose one of them, use it, and determine how well it worked.
- Practice revising reading and lecture notes as part of organizing your study materials and developing a deeper understanding of the content. Check the results of this reorganization the next time you take a quiz or test.

4 Studying, Memory, and Test Taking

Figure 4.1 How we study is as important as what we study. The environment is a critical element of success. Depending on the nature of the work, students may use different types of resources, devices, and methods. (Credit: CUBoulder / Flickr Public Domain (CC-0))

Chapter Outline

4.1 Deepening Your Learning
4.2 Memory
4.3 Studying
4.4 Test Taking
4.5 Developing Metacognition

✎ Introduction

Student Survey

How confident are you in preparing for and taking tests? Take this quick survey to figure it out, ranking questions on a scale of 1–4, 1 meaning "least like me" and 4 meaning "most like me." These questions will help you determine how the chapter concepts relate to you right now. As you are introduced to new concepts and practices, it can be informative to reflect on how your understanding changes over time.

1. I set aside enough time to prepare for tests.
2. If I don't set aside enough time, or if life gets in the way, I can usually cram and get positive results.
3. I prefer to pull all-nighters. The adrenaline and urgency help me remember what I need come test time.
4. I study my notes, highlight book passages, and use flash cards, but I still don't feel like I'm as successful as I should be on tests.

You can also take the Chapter 4 Survey (https://openstax.org/l/collegeconcisesurvey04) anonymously online.

Deep learning is the long-term goal of college students, especially when they start taking classes in their major or that directly connect to their career field. However, deep learning doesn't happen overnight. After you have read the texts and listened to the lectures, you will want to participate in activities that help you move your understanding from your short-term memory to your long-term memory. And there is only one way to learn deeply: through effective study practices and test taking in which you receive feedback on how well you have learned.

About This Chapter

By the time you finish this chapter, you should be able to do the following:

- Describe the key components of deep learning.
- Outline the importance of memory when studying and note some opportunities to strengthen memory.
- Discuss specific ways to increase the effectiveness of studying.
- Articulate test-taking strategies that minimize anxiety and maximize results.
- Discuss the role that metacognition plays in the learning process.

It makes sense that the better you are at studying and test taking, the better results you'll see in the form of high grades and long-term learning and knowledge acquisition. And the more experience you have using your study and memorization skills and employing success strategies during exams, the better you'll get at it. But you have to keep it up—maintaining these skills and learning better strategies as the content you study becomes increasingly complex is crucial to your success. Once you transition into a work environment, you will be able to use these same skills that helped you to be successful in college as you face the problem-solving demands and expectations of your job. Earning high grades is one goal, and certainly a good one when you're in college, but true learning means committing content to long-term memory.

4.1 | Deepening Your Learning

> Estimated completion time: 4 minutes.

Questions to Consider:

- Why is deepening your learning important in college?
- What are the steps to deepening your learning?

In the chapter that covers Reading and Note-taking, you were introduced to Bloom's Taxonomy and its role in helping you plan your learning. As you may recall, college professors will expect learning at a higher level than just being able to recall or identify key terms or concepts. To learn deeply, you will need to do more with the content that you are learning besides reading or listening and taking good notes. This is a good first step, but only a first step!

Beyond this step, deep learning requires that you will need to

- Practice recalling the information (strengthening your memory),
- Learn how to use the information at different levels (Bloom's Taxonomy),
- Use a variety of effective study strategies based on the type of course, content, or test you have,
- Evaluate your learning process by reviewing feedback that you get from your professors, and
- Make changes to your learning processes to ensure that you have indeed learned deeply.

Let's revisit Bloom's Taxonomy to see how the different levels may show up in your learning process. The table below presents the levels of Bloom's Taxonomy and show how it applies to the topic of note-taking methods. If you start at the bottom of the table, you will see that as you move up the taxonomy, the tasks differ. In some cases, they may get more difficult or more time intensive. However, if you only learn the definitions of these note-taking strategies, then you may find it challenging to complete the tasks that are higher-level Bloom's. The rest of the chapter provides you with information and strategies that can help you "move up Bloom's".

Bloom's Level	Topic: Note-Taking Methods
Create	Create an example of each of the following: outlining, Cornell Method, and mind mapping.
Evaluate	Determine which note-taking methods are best for a particular situation.
Analyze	Describe the pros and cons of note-taking methods.
Apply	Offer a specific note-taking strategy for a specific situation.
Understand	Describe the details of outlining, Cornell Method, and mind mapping.
Defining	Define outlining, Cornell Method, and mind mapping.

Table 4.1

Many first-year college students study at the lowest levels of Bloom's Taxonomy by only using flashcards or reviewing their notes so they are able to recognize key terms or ideas. *They do not anticipate that they will be asked to put the information in a new context or demonstrate a detailed understanding of the content.*

This rest of this chapter provides extensive information about how to deepen your learning so that you know the content well enough to answer any type of question on an assignment or test. This information will also help you on the job when you need to learn new information to help your clients or you need to study for career certifications. Either way, you will continue to learn and use learning strategies beyond graduation.

4.2 | Memory

Estimated completion time: 32 minutes.

Questions to Consider:

- How does working memory work, exactly?
- How do short-term and long-term memory function?
- What obstacles exist to remembering?

- When and how should you memorize things?
- In what situations is it best to memorize, and what do you memorize?
- What can you do consistently to improve both your short- and long-term memory?

Memory is one of those cherished but mysterious elements in life. Everyone has memories, and some people are very good at rapid recall, which is an enviable skill for test takers. We know that we seem to lose the capacity to remember things as we age, and scientists continue to study how we remember some things but not others and what memory means, but we don't know that much about memory, really.

Nelson Cowan is one researcher who is working to explain what we do know about memory. His article "What Are the Differences between Long-Term, Short-Term, and Working Memory?" breaks down the different types of memory and what happens when we recall thoughts and ideas. When we remember something, we actually do quite a lot of thinking.[1]

We go through three basic steps when we remember ideas or images: we encode, store, and retrieve that information. Encoding is how we first perceive information through our senses, such as when we smell a lovely flower or a putrid trash bin. Both make an impression on our minds through our sense of smell and probably our vision. Our brains encode, or label, this content in short-term memory in case we want to think about it again.

If the information is important and we have frequent exposure to it, the brain will store it for us in case we need to use it in the future in our aptly named long-term memory. Later, the brain will allow us to recall or retrieve that image, feeling, or information so we can do something with it. This is what we call remembering.

Figure 4.2

ANALYSIS QUESTION

Take a few minutes to list ways you create memories on a daily basis. Do you think about how you make memories? Do you do anything that helps you keep track of your memories?

Foundations of Memory

William Sumrall et al. in the *International Journal of Humanities and Social Science* explain the foundation of memory by noting: "Memory is a term applied to numerous biological devices by which living organisms acquire, retain, and make use of skills and knowledge. It is present in all forms of higher order animals. The most evolutionary forms of memory have taken place in human beings. Despite much research and exploration, a complete understanding of human memory does not exist."[2]

Working Memory

Working memory is a type of short-term memory, but we use it when we are actively performing a task. For example, nursing student Marilyn needs to use her knowledge of chemical reactions to suggest appropriate prescriptions in various medical case studies. She does not have to recall every single fact she learned in years of chemistry classes, but she does need to have a working memory of certain chemicals and how they work with others. To ensure she can make these connections, Marilyn will have to review and study the relevant chemical details for the types of drug interactions she will recommend in the case studies.

1   NCBI. "What are the differences between long-term, short-term, and working memory?" https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2657600/
2   Sumrall, William, et. al. "A Review of Memory Theory." International Journal of Humanities and Social Science, 2016. Vol. 6. No. 5.

In working memory, you have access to whatever information you have stored in your memory that helps you complete the task you are performing. For instance, when you begin to study an assignment, you certainly need to read the directions, but you must also remember that in class your professor reduced the number of problem sets the written instructions indicated you needed to finish. This was an oral addition to the written assignment. The change to the instructions is what you bring up in working memory when you complete the assignment.

Short-Term Memory

Short-term memory is a very handy thing. It helps us remember where we set our keys or where we left off on a project the day before. Think about all the aids we employ to help us with short-term memory: you may hang your keys in a particular place each evening so you know exactly where they are supposed to be. When you go grocery shopping, do you ever choose a product because you recall an advertising jingle? You see the box of cereal and you remember the song on the TV commercial. If that memory causes you to buy that product, the advertising worked. We help our memory along all the time, which is perfectly fine. In fact, we can modify these everyday examples of memory assistance for purposes of studying and test taking. The key is a deliberate use of strategies that are not so elaborate that they are too difficult to remember in our short-term memory.

ACTIVITY

Consider this list of items. Look at the list for no more than 30 seconds. Then, cover up the list and use the spaces below to complete an activity.

Baseball	Picture frame	Tissue	Paper clip
Bread	Pair of dice	Fingernail polish	Spoon
Marble	Leaf	Doll	Scissors
Cup	Jar of sand	Deck of cards	Ring
Blanket	Ice	Marker	String

Without looking at the list, write down as many items as you can remember.

Now, look back at your list and make sure that you give yourself credit for any that you got right. Any items that you misremembered, meaning they were not in the original list, you won't count in your total. TOTAL ITEMS REMEMBERED _____.

There were 20 total items. Did you remember between 5 and 9 items? If you did, then you have a typical short-term memory and you just participated in an experiment, of sorts, to prove it.

Harvard psychology professor George A. Miller in 1956 claimed humans can recall about five to nine bits of information in our short-term memory at any given time. Other research has come after this claim, but this concept is a popular one. Miller's article is entitled "The Magical Number Seven, Plus or Minus Two" and is easily accessible online if you're interested in learning more about this seminar report.[3]

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3 Miller, George A. "The Magical Number Seven, Plus or Minus Two: Some Limits on Our capacity for Processing Information."

Considering the vast amount of knowledge available to us, five to nine bits isn't very much to work with. To combat this limitation, we clump information together, making connections to help us stretch our capacity to remember. Many factors play into how much we can remember and how we do it, including the subject matter, how familiar we are with the ideas, and how interested we are in the topic, but we certainly cannot remember absolutely everything, for a test or any other task we face. As such, we have to use effective strategies, like those we cover later in this chapter, to get the most out of our memories.

ACTIVITY

Now, let's revisit the items above. Go back to them and see if you can organize them in a way that you would have about five groups of items. See below for an example of how to group them.

Row 1: Items found in a kitchen
Row 2: Items that a child would play with
Row 3: Items of nature
Row 4: Items in a desk drawer/school supplies
Row 5: Items found in a bedroom

Cup	Spoon	Ice	Bread	
Baseball	Marble	Pair of dice	Doll	Deck of cards
Jar of sand	Leaf			
Marker	String	Scissors	Paper clip	
Ring	Picture frame	Fingernail polish	Tissue	Blanket

Now that you have grouped items into categories, also known as chunking, you can work on remembering the categories and the items that fit into those categories, which will result in remembering more items. Check it out below by covering up the list of items again and writing down what you can remember.

Now, look back at your list and make sure that you give yourself credit for any that you got right. Any items that you misremembered, meaning they were not in the original list, you won't count in your total. TOTAL ITEMS REMEMBERED _____. Did you increase how many items you could remember?

Long-Term Memory

Long-term memory is exactly what it sounds like. These are things you recall from the past, such as the smell of your elementary school cafeteria or how to pop a wheelie on a bicycle. Our brain keeps a vast array of information, images, and sensory experiences in long-term memory. Whatever it is we are trying to keep in our memories, whether a beautiful song or a list of chemistry vocabulary terms, must first come into our brains in short-term memory. If we want these fleeting ideas to transfer into long-term memory, we have to do some work, such as causing frequent exposure to the information over time (such as studying the terms every day for a period of time or the repetition you performed to memorize multiplication tables or spelling rules) and some relevant manipulation of the information.

Psychological Review, 1956.

According to Alison Preston of the University of Texas at Austin's Center for Learning and Memory, "A short-term memory's conversion to a long-term memory requires changes within the brain . . . and result[s] in changes to neurons (nerve cells) or sets of neurons. . . . For example, new synapses—the connections between neurons through which they exchange information—can form to allow for communication between new networks of neurons. Alternatively, existing synapses can be strengthened to allow for increased sensitivity in the communication between two neurons."[4]

When you work to convert your thoughts into memories, you are literally *changing your mind.* Much of this brain work begins in the part of the brain called the *hippocampus*. Preston continues, "Initially, the hippocampus works in concert with sensory-processing regions distributed in the neocortex (the outermost layer of the brain) to form the new memories. Within the neocortex, representations of the elements that constitute an event in our life are distributed across multiple brain regions according to their content. . . .When a memory is first formed, the hippocampus rapidly combines this distributed information into a single memory, thus acting as an index of representations in the sensory-processing regions. As time passes, cellular and molecular changes allow for the strengthening of direct connections among the neocortical regions, enabling access to the memory independent of the hippocampus."

We learn the lyrics of a favorite song by singing and/or playing the song over and over. That alone may not be enough to get that song into the coveted long-term memory area of our brain, but if we have an emotional connection to the song, such as a painful breakup or a life-changing event that occurred while we were listening to the song, this may help. Think of ways to make your study session memorable and create connections with the information you need to study. That way, you have a better chance of keeping your study material in your memory so you can access it whenever you need it.

ANALYSIS QUESTION

What are some ways you convert short-term memories into long-term memories?

Do your memorization strategies differ for specific courses (e.g., how you remember for math or history)?

Obstacles to Remembering

If remembering things for exams or for learning new disciplines were easy, no one would have problems with it, but students face several significant obstacles to remembering, including a persistent lack of sleep and an unrealistic reliance on cramming. Life is busy and stressful, so you have to keep practicing strategies to help you study and remember successfully, but you also must be mindful of obstacles to remembering.

Lack of Sleep

Sleep and college don't always go well together. You have so much to do! All that reading, all those papers, all those extra hours in the science lab or tutoring center or library! And then we have the social and emotional aspects of going to school, which may not be the most critical aspect of your life as you pursue more education but are a significant part of who you are. When you consider everything you need to attend to in college, you probably won't be surprised that sleep is often the first thing we give up as we search for more time to accomplish everything we're trying to do. That seems reasonable—just wake up an hour earlier or stay up a little later. But you may want to reconsider picking away at your precious sleep time.

Sleep benefits all of your bodily functions, and your brain needs sleep time to dream and rest through the night. You probably can recall times when you had to do something without adequate sleep. We say things like "I just can't wake up" and "I'm walking around half asleep."

4   Preston, Alison. "Ask the Experts: How do short-term memories become long-term memories?" Scientific American, Dec. 2017. https://www.scientificamerican.com/article/how-do-short-term-memories-become-l/

In fact, you may actually be doing just that. Lack of sleep impairs judgment, focus, and our overall mood. Do you know anyone who is always grumpy in the morning? A fascinating medical study from the University of California Los Angeles (UCLA) claims that sleep deprivation is as dangerous as being drunk, both in what it does to our bodies and in the harm we may cause to ourselves and others in driving and performing various daily tasks.[5] [6]

If you can't focus well because you didn't get enough sleep, then you likely won't be able to remember whatever it is you need to recall for any sort of studying or test-taking situation. Most exams in a college setting go beyond simple memorization, but you still have a lot to remember for exams. For example, when Saanvi sits down to take an exam on introductory biology, she needs to recall all the subject-specific vocabulary she read in the textbook's opening chapters, the general connections she made between biological studies and other scientific fields, and any biology details introduced in the unit for which she is taking the exam.

Trying to make these mental connections on too little sleep will take a large mental toll because Saanvi has to concentrate even harder than she would with adequate sleep. She isn't merely tired; her brain is not refreshed and primed to conduct difficult tasks. Although not an exact comparison, think about when you overtax a computer by opening too many programs simultaneously. Sometimes the programs are sluggish or slow to respond, making it difficult to work efficiently; sometimes the computer shuts down completely and you have to reboot the entire system. Your body is a bit like that on too little sleep.

On the flip side, though, your brain on adequate sleep is amazing, and sleep can actually assist you in making connections, remembering difficult concepts, and studying for exams. The exact reasons for this is still a serious research project for scientists, but the results all point to a solid connection between sleep and cognitive performance.

If you're interested in learning more about this research, the American Academy of Sleep Medicine (AASM) is a good place to start. One article is entitled "College Students: Getting Enough Sleep Is Vital to Academic Success."

ANALYSIS QUESTION

How long do you sleep every night on average? Do you see a change in your ability to function when you haven't had enough sleep? What could you do to limit the number of nights with too little sleep?

Downside of Cramming

At least once in their college careers, most students will experience the well-known pastime called *cramming*. Consider the following scenario: Shelley has lots of classes, works part-time at a popular restaurant, and is just amazingly busy, so she puts off serious study sessions day after day. She isn't worried because she has set aside time she would have spent sleeping to cram just before the exam. That's the idea anyway. Originally, she planned to stay up a little late and study for four hours from 10 p.m. to 2 a.m. and still get several hours of refreshing sleep. But it's Dolphin Week or Beat State Day or whatever else comes up, and her study session doesn't start until midnight—she'll pull an *all-nighter* (to be more precise, this is actually an *all-really-early-morning-er,* but it doesn't quite have the same ring to it). So, two hours after her original start time, she tries to *cram* all the lessons, problems, and information from the last two weeks of lessons into this one session. Shelley falls asleep around 3 a.m. with her notes and books still on her bed. After her late night, she doesn't sleep well and goes into the morning exam tired.

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5   Nir, Yuval, et. al. "Selective neuronal lapses precede human cognitive lapses following sleep deprivation," Nature Medicine volume23, pages 1474–1480 (2017).
6   UCLA Health. "Drowsy Driving." https://www.uclahealth.org/sleepcenter/drowsy-driving

Shelley does okay but not great on the exam, and she is not pleased with her results. More and more research is showing that the stress Shelley has put on her body doing this, combined with the way our brains work, makes cramming a seriously poor choice for learning.

One sleep researcher, Dr. Susan Redline from Boston, says, "Sleep deficiency can affect mood and the ability to make memories and learn, but it also affects metabolism, appetite, blood pressure, levels of inflammation in the body and perhaps even the immune response."[7]

Your brain simply refuses to cooperate with cramming—it sounds like a good idea, but it doesn't work.

Cramming causes stress, which can lead to paralyzing test anxiety; it erroneously supposes you can remember and understand something fully after only minimal exposure; and it overloads your brain, which, however amazing it is, can only focus on one concept at a time and a limited number of concepts all together for learning and retention.

Leading neuroscientist John Medina claims that the brain begins to wander at about 10 minutes, at which point you need a new stimulus to spark interest. That doesn't mean you can't focus for longer than 10 minutes; you just have to switch gears a lot to keep your brain engaged. Have you ever heard a speaker drone on about one concept for, say, 30 minutes without somehow changing pace to engage the listeners? It doesn't take much to re-engage—pausing to ask the listeners questions or moving to a different location in the room will do it—but without these subtle attention markers, listeners start thinking of something else. The same thing happens to you if you try to cram all reading, problem-solving, and note reviewing into one long session; your brain will wander.

Determining When/What to Memorize

In the realm of learning and studying, some conditions warrant memorization as the most effective way to work with information. For instance, if you are expected to have a working knowledge of conversational French or Spanish, you will have to memorize some words. Simply knowing a long list of terms isn't going to help you order food in a café or ask for directions in a foreign country because you also need to understand the other language's grammar and have some sort of context for what needs to be said from your vocabulary list. But you cannot say the words in a different language if you cannot remember your vocabulary. From this scenario, you can assume that memorization is a good fit for some parts of language acquisition.

If you approach all your studying as memorization, you will find your course tests difficult at best. Most college courses will ask you to apply, analyze, evaluate, and create with the information you are learning, which is discussed earlier in the chapter. Merely being able to memorize so that you can recognize or recall information will not get you far in your college classes.

A worthwhile book on memory, thinking, and learning is a short study called *Make It Stick: The Science of Successful Learning* by Peter Brown, Henry Roediger, and Mark McDaniel. The authors conclude, after extensive research, that our attempts to speed up learning and make studying easier are not good ideas. Studying is hard work, and it should be. For learning to *stick*, we need to work hard to pull the information out of our memory and use it by continually pushing ourselves to accomplish increasingly difficult tasks.

4.3 | Studying

Estimated completion time: 27 minutes.

Questions to Consider:

- How do you prepare yourself and your environment for successful studying?

7 Redline, Susan https://abcnews.go.com/Health/Sleep/health-hazards-linked-lack-sleep/story?id=16524313

- What study strategies will be most beneficial to you?
- What are learning preferences and strategies and how can you leverage those to your advantage?

Preparing to Study

Studying is hard work, but you can still learn some techniques to help you be a more effective learner. Two major and interrelated techniques involve avoiding distractions to the best of your ability and creating a study environment that works to help you concentrate.

Avoiding Distractions

We have always had distractions—video games, television shows, movies, music, friends—even housecleaning can distract us from doing something else we need to do, like study for an exam. That may seem extreme, but sometimes vacuuming is the preferred activity to buckling down and working through calculus problems! Cell phones, tablets, and portable computers that literally bring a world of possibilities to us anywhere have brought *distraction* to an entirely new level. When was the last time you were with a large group of people when you didn't see at least a few people on devices?
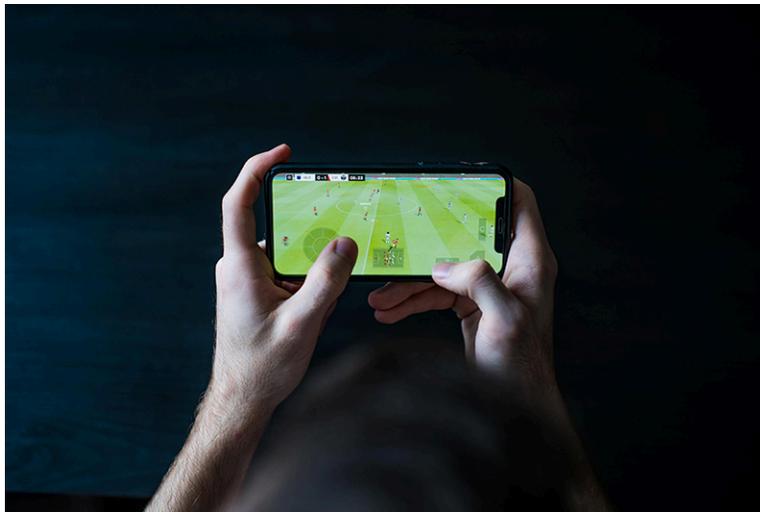
Figure 4.3 Video games are a common distraction, but we need to be aware that even tedious activities like cleaning can be a distraction from studying. (Credit: Footy.com Images / Flickr Attribution 2.0 Generic (CC-BY 2.0))

When you study, your biggest challenge may be to block out all the competing noise. And letting go of that connection to our friends and the larger world, even for a short amount of time, can be difficult. Perhaps the least stressful way to allow yourself a distraction-free environment is to make the study session a definite amount of time: long enough to get a significant amount of studying accomplished but short enough to hold your attention.

You can increase that attention time with practice and focus. Pretend it is a professional appointment or meeting during which you cannot check e-mail or texts or otherwise engage with your portable devices. We have all become very attached to the ability to check in—anonymously on social media or with family and friends via text, chat, and calls. If you set a specific amount of time to study without interruptions, you can convince your wandering mind that you will soon be able to return to your link to the outside world. Start small and set an alarm—a 30-minute period to review notes, then a brief break, then another 45-minute study session to quiz yourself on the material, and so on.

When you prepare for your optimal study session, remember to do these things:

- Put your phone out of sight—in another room or at least some place where you will not see or hear it vibrate or ring. Just flipping it over is not enough.
- Turn off the television or music (more on that in the next section).
- Unless you are deliberately working with a study group, study somewhere alone if possible, or at least far

enough away from others to not hear them talking.

If you live with lots of other people or don't have access to much privacy, see if you can negotiate some space alone to study. Ask others to leave one part of the house or an area in one room as a quiet zone during certain hours. Ask politely for a specific block of time; most people will respect your educational goals and be willing to accommodate you. If you're trying to work out quiet zones with small children in the house, the bathtub with a pillow can make a fine study oasis.

Study Environment

You may not always be in the mood or inspired to study. And if you have a long deadline, maybe you can blow off a study session on occasion, but you shouldn't get into the habit of ignoring a strong study routine. Jane Austen once wrote in a letter, "I am not at all in a humor for writing; I must write on till I am." Sometimes just starting is the hard part; go ahead and begin. Don't wait around for your study muse; start working, and she'll show up.

Sometimes you just need to plop down and study whenever and wherever you can manage—in the car waiting for someone, on the bus, at the Little League field as you cheer on your shortstop. And that's okay if this is the exception. For long-term success in studying, though, you need a better study setting that will help you get the most out of your limited study time. Whatever your space limitations, carve out a place that you can dedicate to reading, writing, note-taking, and reviewing. This doesn't need to be elaborate and expensive—all you truly need is a flat surface large enough to hold either your computer or writing paper, book or notes, pens/pencils/markers, and subject-specific materials you may need (e.g., stand-alone calculators, drawing tools, and notepads). Your space should be cool or warm enough for you to be comfortable as you study. What do you have now that you consider your study space? Is it set up for your optimal success?

Figure 4.4 Which is before, and which is after? (Credit: Ali West / Flickr / Attribution 2.0 Generic (CC-BY 2.0))

If it is at all possible, try to make this area exclusive to your study sessions and something you can leave set up all the time and a place out of the way of family or roommate traffic. For example, Martina thought setting up her study station on the dining room table was a good idea at first. The view was calming, and the table was big enough to spread out and could even hold all her materials to study architectural drawings, her favorite subject. But then she needed the table for a small family dinner party, so she had to find a cubbyhole to hide away her supplies with some needing to go into a closet in the next room. Now she was spread out over multiple study spaces. And the family TV was in an adjacent room, not visible from the table but certainly an auditory distraction. Martina ultimately decided to forgo her view and create a smaller station in an unused bedroom so she could leave her supplies out and have a quieter area. You may have to try out numerous places to determine what works best for you. In fact, if you have a few comfortable places to study, such as the library, a coffee shop, and your room, you will increase your ability to recall the information you are studying because these different environments will help you encode the information you are studying in multiple ways. The belief that you must study in the same place and in the same way is a myth: Varying your study spaces and your study strategies can help you encode, store, and retrieve the information more effectively.

Wherever you study, try to make it a welcoming place you want to be in—not an uncomfortable environment that makes you want to just do the minimum you must complete and leave. You should include the basics: a good chair, a work surface, and whatever materials, books, notes, and other supplies you need for the subject

you are studying.

You don't need an elaborate setting, but you may want to consider including a few effective additions if you have the space:

- small bulletin board for often-used formulas
- encouraging quotes or pictures of your goal
- whiteboard for brainstorming
- sticky notes for reminders in texts and notes
- file holder for most-used documents
- bookshelf for reference books

ACTIVITY

Describe every element in your ideal study environment and explain why it's there as well as how it will make more efficient use of your time, limit distractions, or in some other way strengthen your ability to study.

After you have described your ideal study environment, think about how you can adapt that environment if you cannot be in your favorite place to study. How do you *make your own space* in the library, a student lounge, or a dedicated space on campus for student studying?

Debunking Study Myths

MYTH #1: You can multitask while studying.

How many times do you eat in the car? Watch TV while you write out a grocery list? Listen to music while you cook dinner? What about type an e-mail while you're on the phone with someone else and jot down notes about the call? The common term for this attempt to do more than one thing at a time is multitasking, and almost everyone does it at some point. On some days, you simply cannot accomplish all that you want to get done, so you double up. The problem is, multitasking doesn't really work. Of course, it exists, and we do it. For instance, we walk and chew gum or drive and talk, but we are not really thinking about two or more distinct things or doing multiple processes simultaneously. You are far more likely to miss important details, and far less likely to retain information, if you try to multitask when studying.

MYTH #2: Highlighting main points of a text is useful on its own.

Another myth of studying that seems to have a firm hold is that the idea of highlighting text—in and of itself—is the best way to review study material. It is one way, and you can get some benefit from it, but don't trick yourself into spending too much time on this surface activity and consider your study session complete.

Annotating texts or notes is a first-step type of study practice. If you allow it to take up all your time, you may think you are fully prepared for an exam because you put in the time. Actually, you need much more time reviewing and retrieving your lessons and ideas from the text or class lecture as well as quizzing yourself to accomplish your goal of learning so you can perform well on the exam. Highlighting is a task you can do rather easily, and it makes you feel good because you are actively engaging with your text, but true learning needs more steps.

MYTH #3: Studying effectively is effortless.

There is nothing effortless, or even pleasant at times, about studying. This is why so many students don't put in the time necessary to learn complex material: it takes time, effort, and, in some cases, a little drudgery. This is not to say that the outcome, learning—and maybe making an A—is not pleasant and rewarding. It is just

that when done right, learning takes focus, deliberate strategies, and time. Think about a superstar athlete who puts in countless hours of drills and conditioning so that she makes her work on the field look easy. If you can also *enjoy* the studying, the skill development, and the knowledge building, then you will most likely be more motivated to do the work.

> **Myth**: *You can multitask while studying*.
>
> **Truth:** You are far more likely to miss important details and far less likely to retain information.
>
> **Myth**: *Highlighting is useful on its own*.
>
> **Truth:** Highlighting does not usually lead to retention, though it may help us find important information later. Annotating and summarizing are far more effective—and often more efficient—study methods.
>
> **Myth**: *Studying effectively is effortless*.
>
> **Truth:** Learning anything—including academic concepts and skills—takes focus, deliberate strategies, repetition, and time.

Figure 4.5 Study and learning myths persist in many people, even those who have achieved success in college.

ANALYSIS QUESTION

When are you most liable to multitask? How could you be more aware of this practice and try to eliminate it, especially when it comes to studying? How can you make your initial text highlighting more time efficient so you can include other study practices?

Study Strategies

Everyone wishes they had a better memory or a stronger way to use memorization. You can make the most of the memory you have by making some conscious decisions about how you study and prepare for exams. Incorporate these ideas into your study sessions:

Practicing effective memorization is when you use a trick, technique, or strategy to recall something—for another class, an exam, or even to bring up an acquaintance's name in a social situation. Really whatever works for you to recall information is a good tool to have. You can create your own quizzes and tests to go over material from class. You can use mnemonics to jog your memory. You can work in groups to develop unique ways to remember complex information. Whatever methods you choose to enhance your memory, keep in mind that repetition is one of the most effective tools in any memory strategy. Do whatever you do over and over for the best results.

Using Mnemonics

Mnemonics (pronounced new-monics) are a way to remember things using reminders that are linked to the content you are trying to remember. Did you learn the points of the compass by remembering NEWS (north, east, west, and south)? Or the notes on the music staff as FACE or EGBDF (every good boy does fine)? These are mnemonics, specifically ***acronyms***, or words created out of the first letters of the terms you are trying to recall. When you're first learning something and you aren't familiar with the foundational concepts, these help you bring up the information quickly, especially for multistep processes or lists. After you've worked in that discipline for a while, you likely don't need the mnemonics, but you probably won't forget them either.
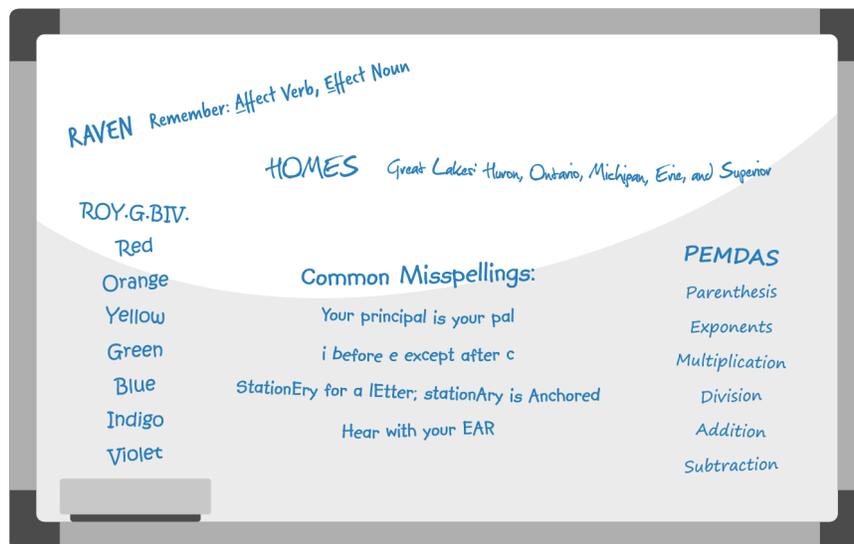
Figure 4.6 Familiar Mnemonics You May Find Useful

There are a variety of mnemonics that work well for college students, but use them with caution as they are good for learning basic information and not complex material. In addition to acronyms, here are a few that college students have used to help them recall.

- **Acrostic sentences.** These are sentences formed from the first letter of each item you are trying to remember. They work best for remembering steps in a process. For example, "Please Excuse My Dear Aunt Sally" is an acrostic sentence for the steps in the order of operations when solving an equation. Each word starts with a letter that corresponds to another word in the steps: Parentheses, Exponents, Multiplication, Division, Addition, and Subtraction.
- **Chunking.** Grouping items together is another way to improve recall by organizing them by a characteristic they have in common. For example, you may need to remember the countries in Africa and could organize them by relative size, location (north, south, etc.), or letter they begin with.
- **Memory palace.** This mnemonic device is more complicated than most because it requires a few steps to create, but many students have found that this strategy works well for them in classes where they must recall a large amount of content. The memory palace, also called a Roman Room or the loci method, requires you to think of a physical space, real or imagined, in which you can "place" items you need to recall within that location. For example, if you are thinking of your own bedroom as the space and you need to remember the parts of speech, you may place "verb" in front of the door to your room as you will need to use an action to open it up. Then, your bed may be where you place "noun" because it is where you add actions such as *sleep*, *read, and daydream*. The mirror on your wall may be where you place the term "adjective" because you look into it every day to see what you look like: *sad*, *happy*, *sleepy*.

ANALYSIS QUESTION

Do you have other mnemonics that help you remember difficult material? What are they? How have they helped you with remembering important things?

Practicing Concept Association

When you study, you're going to make connections to other things—that's a good thing. It shows a highly intelligent ability to make sense of the world when you can associate like and even somewhat unlike components. If, for instance, you were reading Martin Luther King Jr.'s "Letter from a Birmingham Jail," and you

read the line that he had been in Birmingham, you may remember a trip you took with your family last summer through Alabama and that you passed by and visited the civil rights museum in Birmingham. This may remind you of the different displays you saw and the discussions you had with your family about what had happened concerning civil rights in the 1950s, '60s, and '70s in the United States.

This is a good connection to make, but if your assignment is to critique the literary aspects of King's long epistle, you need to be able to come back to the actual words of the letter and see what trends you can see in his writing and why he may have used his actual words to convey the powerful message. The connection is fine, but you can't get lost in going down rabbit holes that may or may not be what you're supposed to be doing at the time. Make a folder for this assignment where you can put things such as a short summary of your trip to Alabama. You may eventually include notes from this summary in your analysis. You may include something from a website that shows you information about that time period. Additionally, you could include items about Martin Luther King Jr.'s life and death and his work for civil rights. All of these elements may help you understand the significance of this one letter, but you need to be cognizant of what you're doing at the time and remember it is not usually a good idea to just try to keep it all in your head. The best idea is to have a way to access this information easily, either electronically or in hard copy, so that if you are able to use it, you can find it easily and quickly.

Generating Idea Clusters

Like mnemonics, idea clusters are nothing more than ways to help your brain come up with ways to recall specific information by connecting it to other knowledge you already have. For example, Andrea is an avid knitter and remembers how to create complicated stitches by associating them with nursery rhymes she read as a child. A delicate stitch that requires concentration because it makes the yarn look like part of it is hiding brings to mind Red Riding Hood, and connecting it to that character helps Andrea recall the exact order of steps necessary to execute the design. You can do the same thing with song lyrics, lines from movies, or favorite stories where you draw a connection to the well-known phrase or song and the task you need to complete.

APPLICATION

Choose one of the following, and create an idea cluster to group and organize:

- Example A: aviation jobs in North America
- Example B: the use of analytics in sports to determine team rosters
- Example C: how social media affects political campaigns

Start the idea cluster with the topic circled in the middle of the page. For Example A, you might make one cluster off the main circle for specific positions; you could add another cluster for salary ranges and another for geographic regions.

Three Effective Study Strategies

There are more than three study strategies, but focusing on the most effective strategies will make an enormous difference in how well you will be able to demonstrate learning (also known as "acing your tests"). Here is a brief overview of each of the three strategies:

- Spacing—This has to do with *when* you study. Hint: Don't cram; study over a period of days, preferably with "breaks" in between.
- Interleaving—This has to do with *what* you study. Hint: Don't study just one type of content, topic, chapter, or unit at a time; instead, mix up the content when you study.
- Practice testing—This has to do with *how* you study. Hint: Don't just reread content. You must quiz or test

your ability to retrieve the information from your brain.

Spacing

We all know that cramming is not an effective study strategy, but do we know why? Research on memory suggests that giving yourself time in between study sessions actually helps you forget the information. And forgetting, which sounds like it would be something you *don't* want to do, is actually good for your ability to remember information long-term. That's because every time you forget something, you need to relearn it, leading to gains in your overall understanding and "storage" of the material. The table below demonstrates how spacing works. Assume you are going to spend about four hours studying for a sociology exam. Cramming would have you spending most of those four hours the night before the exam. With spacing, on the other hand, you would study a little bit each day.

Spacing

	Sunday	**Monday**	**Tuesday**	**Wednesday**	**Thursday**	**Friday**	**Saturday**
Cramming				Study for 1 hour	Study for 3 hours	**Sociology Test**	
Spacing	Study for 1 hour		Study for 30 minutes	Study for 1 hour	Study for 90 minutes	**Sociology Test**	

Table 4.2

Interleaving

One particular studying technique is called interleaving, which calls for students to mix up the content that is being studied. This means not just spending the entire study session on one sort of problem and then moving on to a different sort of problem at a later time.

If you take the schedule we used for the spacing example above, we can add the interleaving concepts to it. Notice that interleaving includes revisiting material from a previous chapter or unit or revisiting different types of problems or question sets. The benefit is that your brain is "mixing up" the information, which can sometimes lead to short-term forgetting but can lead to long-term memory and learning.

Interleaving

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
Read Sociology, Chapters 1 and 3 Reorganize reading notes		Practice test for Sociology, Chapters 1 and 3 Take Ch 1 online quiz Create Chapter 2 concept map	Take online quizzes for Chapters 2 and 3 Reorganize notes Create practice test	Reorganize and create concept maps from notes Review items missed on online quizzes Take practice test and review challenge areas	**TEST in sociology, Chapters 1-3**

Table 4.3

Practice Testing

You can do a practice "test" in two ways. One is to test yourself as you are reading or taking in information. This is a great way to add a little variety to your studying. You can ask yourself what a paragraph or text section means as you read. To do this, read a passage in a text, cover up the material, and ask yourself, "What was the main idea of this section?" Recite aloud or write down your answer, and then check it against the original information.

Another, more involved, way to practice test is to create flashcards or an actual test by writing a test. This takes more time, but there are online programs such as Quizlet that make it a little easier. Practice testing is an effective study strategy because it helps you practice *retrieving* information, which is what you want to be able to do when you are taking the real test.

One of the best ways to learn something is to teach it to someone else, so ask a friend or family member if you can explain something to them, and *teach* them the lesson. You may find you know more about the subject than you thought or you may realize quickly that you need to do more studying. Why does teaching someone else rank as one of the most effective ways to learn something? It is a form of practice testing that requires you to demonstrate you know something in front of someone else! No one wants to look like they don't know what they are talking about, even if your audience is another classmate.

Recognizing Strengths/Weaknesses of Preferred Study Approaches

Most people don't learn to ride a bicycle by reading a manual; they learn by watching others, listening to instructions, and getting up on the seat and learning to balance—sometimes with training wheels or a proud parent holding on, but ultimately without any other support. They may fall over and feel insecure, but usually, they learn to make the machine go. Most of us employ multiple methods of study all the time. You usually only

run into trouble if you stubbornly rely on just one way to learn or study and the material you're studying or the task you want to accomplish doesn't lend itself to that preference. You can practice specific strategies to help you learn in your preferred learning approach. Can you think of a time when the way you usually study a situation didn't work?

When deciding on a study approach, consider what you know about the material and the type of knowledge it involves. Is it a group of concepts related to problem-solving methods, such as those you'd find in a physics class? Or is it a literary analysis of a novel? Consider as many elements as possible about the material -- and the way the material will be assessed -- to help choose a study approach.

You should also consider your instructor's preferred method of teaching and learning. Watch the way they teach lessons or convey necessary course information to the class. Do they almost always augment lessons with video clips to provide examples or create a memorable narrative? Do they like to show you how something works by demonstrating and working with their hands—for instance, assembling a piece of equipment by taking it apart and putting it back together again? Echoing their teaching approach may help your studying approach. That doesn't mean you have to change your entire learning approach to match your instructors' methods. Many instructors understand that their students will have different ways of learning and try to present information in multiple ways.

Practicing Active Continuous Improvement for All Preferences

You can certainly learn through specific approaches or according to specific preferences, but you will also need to adapt to different situations, skills, and subject areas. Don't limit yourself to thinking you can *only* learn one way or another. That mindset induces anxiety when you encounter a learning situation that doesn't match your preference. What if your instructor *only* uses a spoken lecture to teach concepts in your chemistry class, and you consider yourself a visual learner? Or what if the only method presented to you for learning mathematical computations is to see videos of others working problems, and you're more hands-on? You may have to concentrate in a different way or devise other strategies to learn, but you can do it. In fact, you should sometimes work on the styles/preferences that you feel are your least favorite; it will actually strengthen your overall ability to learn and retain information.[8]

Dr. Stephen Covey, famous leadership coach and businessman, called this attention to knowing and honing all your skill sets, not just your favorites, *sharpening the saw.* He advised that people should be aware of their strengths but should always hone their weaknesses by saying, "We must never become too busy sawing to take time to sharpen the saw."[9] For instance, in the chemistry lecture example, you may need to take good notes from the spoken lecture and then review those notes as you sketch out any complex ideas or formulas. If the math videos are not enough for you to grasp difficult problems, you may ask for or find your own problems for additional practice covering that particular mathematical concept to solve on your own.

4.4 | Test Taking

Estimated completion time: 23 minutes.

Questions to Consider:

- What are the differences between test prep and taking the actual test?
- How can you take a *whole person* approach to test taking?
- What can you do on test day to increase your confidence and success?
- What should you know about test anxiety?

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8   Newton, Phillip M., & Miah, Mahallad. "Evidence-Based Higher Education—Is the Learning Style 'Myth' Important?" *Frontiers in Psychology* 8:444 (2017) DOI: 10. 3389/FPSYG. 2017.00444.

9   Covey, Stephen. The 7 Habits of Highly Effective People ® https://www.franklincovey.com/the-7-habits.html

Once you are practicing good study habits, you'll be better prepared for actual test taking. Since studying and test taking are both part of learning, honing your skills in one will help you in the other.

Probably the most obvious differences between your preparation for an exam and the actual test itself is your level of urgency and the time constraints. A slight elevation in your stress level can actually be okay for testing—it keeps you focused and *on your game* when you need to bring up all the information, thinking, and studying to show what you've learned. Properly executed, test preparation mixed in with a bit of stress can significantly improve your actual test-taking experience.

Preparation vs. Actual Test

You can replicate the effective sense of urgency an actual test produces by including timed writing into your study sessions. You don't need all of your study time to exactly replicate the test, but you would be well served to find out the format of the exam in advance and practice the skills you'll need to use for the various test components. Consider this scenario: On one early exam in history, Stuart learned the prof was going to include several short-answer essay questions—one for each year of the time period covered. Stuart set up practice times to write for about 15 to 20 minutes on significant events from his notes because he estimated that would be about how much time he could devote out of the hour-long testing session to write one or two required short-answer questions. He would write a prompt from his notes, set a timer, and start writing. If you're ready and you have practiced and know the material, 20 minutes is adequate to prepare, draft, and revise a short response, but you don't have a lot of extra time.

Likewise, in a math exam, you will need to know what kinds of problems you will have to solve and to what extent you'll need to show your computational work on the exam. If you are able to incorporate this sort of timed problem-solving into your study time, you'll be more prepared and confident when you actually come to the exam. Making yourself adhere to a timed session during your study can only help. It puts a sense of urgency on you, and it will help you to find out what types of problems you need to practice more than ones that perhaps you're more comfortable solving.

Leveraging Study Habits for Test Prep

In your mind, you probably know what you need to do to be prepared for tests. Occasionally, something may surprise you—emphasis on a concept you considered unimportant or a different presentation of a familiar problem. But those should be exceptions. You can use all of your well-honed study habits to get ready for exams. Figure 4.7 is a checklist for study and test success for your consideration:

1   **Read All Assigned Lessons** — Prepare to make the most of your class time with instructors and other students.

2   **Attend All Classes** — You cannot interact with the material and the others in your class if you are not there.

3   **Take Notes During Each Class** — Even if you are uncertain about the lesson's topics or importance, take notes so that you remember what was covered.

4   **Review And Improve Notes** — Do this within 24 hours. Memory studies show that we have to work with information quickly or we'll start to forget it.

5   **Study Regularly** — Work at least one hour per week for every hour in class; repetition and frequency are important factors for studying.

6   **Re-read Significant Text Passages** — This helps build your memory and better prepares you for class and tests.

7   **Review with Classmates** — You each receive the benefit of the other's perspective on the material.

8   **Take Authentic Practice Tests** — Use study guides or sample tests to gauge what you really know and what you need to work on.

9   **Practice Timed Writing** — Timing is essential in most test situations. Practice can help you manage the pressure and ensure you use the time effectively.

10   **Get Enough Sleep Every Night** — Sleep impacts memory, performance, energy, and our ability to handle stress and the unexpected (both common in test situations).

Figure 4.7 Checklist for Academic Success

Read this list with each separate class in mind, and check off the items you already do. Give yourself one point for every item you checked. If you always take the success steps—congratulations! They are not a guarantee, but doing the steps mindfully will give you a nice head start. If you do fewer than five of the steps—you have some work to do. But recognition is a good place to start, and you can incorporate these steps starting now.

As strange as this may sound, you can find some interesting research articles online about using the taste or smell of peppermint to increase memory, recall, and focus. Read more at: http://naturalsociety.com/mint-scent-improve-brain-cognition-memory (https://openstax.org/l/cognition-memory). While sucking on a peppermint disk won't replace studying, why not experiment with this relatively easy idea that seems to be gaining some scientific traction?

Whole Person Approach to Testing

Just because you are facing a major exam in your engineering class (or math or science or English class) doesn't mean everything else in your life comes to a stop. Perhaps that's somewhat annoying, but that's reality. Allergies still flare up, children still need to eat, and you still need to sleep. You must see your academic life as one segment of who you are—it's an important segment, but just one aspect of who you are as a whole person. Consider this example: Neela tries to turn off everything else when she has exams coming up in her nursing program, which is pretty often. She ignores her health, puts off her family, tries to reschedule competing work tasks, and focuses all her energy on the pending exam. On the surface, that sounds like a reasonable approach, but if she becomes really sick by ignoring a minor head cold, or if she misses an important school deadline for one of her children, Neela risks making matters worse by attempting to compartmentalize so strictly. Taking care of her own health by eating and sleeping properly; asking for help in other aspects of her busy life, such as attending to the needs of her children; and seeing the big picture of how it all fits together would be a better approach. Pretending otherwise may work sporadically, but it is not sustainable for the long run.

A whole person approach to testing takes a lot of organization, scheduling, and attention to detail, but the life-long benefits make the effort worthwhile.

Establishing Realistic Expectations for Test Situations

Would you expect to make a perfect pastry if you've never learned how to bake? Or paint a masterpiece if you've never tried to work with paints and brushes? Probably not. But often we expect ourselves to perform at much higher levels of achievement than that for which we've actually prepared. If you become very upset and stressed if you make any score lower than the highest, you probably need to reevaluate your own expectations for test situations. Striving to always do your best is an admirable goal. Realistically knowing that your current *best* may not achieve the highest academic ratings can help you plot your progress.

Realistic continuous improvement is a better plan, because people who repeatedly attempt challenges for which they have not adequately prepared and understandably fail (or at least do not achieve the desired highest ranking) often start moving toward the goal in frustration. They simply quit. This doesn't mean you settle for mediocre grades or refrain from your challenges. It means you become increasingly aware of yourself and your current state and potential future. Know yourself, know your strengths and weaknesses, and be honest with yourself about your expectations.

Understanding Accommodations and Responsibilities

As with so many parts of life, some people take exams in stride and do just fine. Others may need more time or change of location or format to succeed in test-taking situations. With adequate notice, most faculty will provide students with reasonable accommodations to assist students in succeeding in test situations. If you feel that you would benefit from receiving these sorts of accommodations, first speak with your instructor. You may also need to talk to a student services advisor for specific requirements for accommodations at your institution.

If you need accommodations, you are responsible for understanding what your specific needs are and communicating your needs with your instructors. Before exams in class, you may be allowed to have someone else take notes for you, receive your books in audio form, engage an interpreter, or have adaptive devices in the classroom to help you participate. Testing accommodations may allow for additional time on the test, the use of a scribe to record exam answers, the use of a computer instead of handwriting answers, as well as other means to make the test situation successful. Talk to your instructors prior to the day of the test if you have questions about testing accommodations.
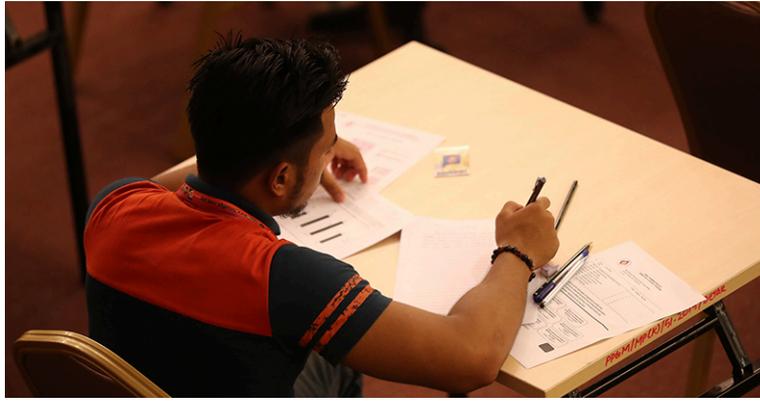
Figure 4.8 Part of preparing for a test is understanding the testing environment, which materials will be required, and which will be prohibited. For example, if you are not allowed to have your phone with you during a test, you may need to leave it in a secure place. Any approved accommodations you need should be indicated to the instructor ahead of time. (Credit: Universiti Malaysia Sarawak Malaysia / flickr Attribution 2.0 Generic (CC-BY 2.0))

Prioritizing Time Surrounding Test Situations

Keep in mind that you don't have any more or less time than anyone else, so you can't *make time* for an activity. You can only use the time everyone gets wisely and realistically. Exams in college classes are important, but they are not the only significant events you have in your classes. In fact, everything leading up to the exam, the exam itself, and the post-exam activities are all one large continuum. Think of the exam as an event with multiple phases, more like a long-distance run instead of a 50-yard dash. Step back and look at the big picture of this timeline. Draw it out on paper. What needs to happen between now and the exam so you feel comfortable, confident, and ready?

If your instructor conducts some sort of pre-exam summary or prep session, make sure to attend. These can be invaluable. If this instructor does not provide that sort of formal exam prep, create your own with a group of classmates or on your own. Consider everything you know about the exam, from written instructions to notes you took in class, including any experiential notes you may have from previous exams, such as the possibility of bonus points for answering an extra question that requires some time management on your part. You can read more about time management in Managing Your Time and Priorities.

GET CONNECTED

Which apps can help you study for a test, increase your memory, and even help you overcome test anxiety?

Personal (https://openstax.org/l/personalzen) Zen is a free online gaming app clinically proven to reduce stress and anxiety. The games retrain your brain to think more positively, reducing stress to help you focus on the experiences around you.

Games like solitaire, hangman, and Simon Says all build on your memory, keeping it sharp and active. There are loads of fun, free online memory games you can use to make time wasting a little less wasteful. For more than 250 options, visit the Memory Improvement Tips (https://openstax.org/l/onlinememorygames) website.

Study Hall (https://openstax.org/l/studyhall) might be able to help you dig into a research topic or find additional content to help you if you're struggling with a course. Their library of free lectures and content is created by expert instructors across a number of course areas.

Test Day

Once you get to the exam session, try your best to focus on nothing but the exam. This can be very difficult

with all the distractions in our lives. But if you have done all the groundwork to attend the classes, completed the assignments, and scheduled your exam prep time, you are ready to focus intently for the comparatively short time most exams last.

Arriving to class:

Don't let yourself be sidetracked right at the end. Beyond the preparation we've discussed, give yourself some more advantages on the actual test day:

- Get to the testing location a few minutes early so you can settle into your place and take a few relaxing breaths.
- Don't let other classmates interrupt your calmness at this point.
- Just get to your designated place, take out whatever supplies and materials you are allowed to have, and calm your mind.

Taking the test:

Once the instructor begins the test:

- Listen carefully for any last-minute oral directions that may have changed some detail on the exam, such as the timing or the content of the questions.
- As soon as you receive the exam sheet or packet, make a quick scan over the entire test.
- Don't spend a lot of time on this initial glance, but make sure you are familiar with the layout and what you need to do.
- Using this first review, decide how you will allocate your available time for each section.
- You can even jot down how many minutes you can allow for the different sections or questions.

Then for each section, if the exam is divided this way, be sure you **read the section directions** very carefully so you don't miss an important detail. For example, instructors often offer options—so you may have four short-answer questions from which to choose, but you only need to answer two of them. If you had not read the directions for that section, you may have thought you needed to provide answers to all four prompts. Working on extra questions for which you likely will receive no credit would be a waste of your limited exam time. The extra time you spend at the beginning is like an investment in your overall results.

Answer every required question on the exam. Even if you don't complete each one, you may receive some credit for partial answers. Whether or not you can receive partial credit would be an excellent question to ask before the exam during the preparation time. If you are taking an exam that contains multiple-choice questions, go through and answer the questions about which you are the most confident first.

Read the entire question carefully even if you think you know what the stem (the introduction of the choices) says, and read all the choices. Skip really difficult questions or ones where your brain goes blank. Then you can go back and concentrate on those skipped ones later after you have answered the majority of the questions confidently. Sometimes a later question will trigger an idea in your mind that will help you answer the skipped questions.

And, in a similar fashion to spending a few minutes right at the beginning of the test time to read the directions carefully and identify the test elements, **allow yourself a few minutes at the end of the exam session to review your answers.** Depending on what sort of exam it is, you can use this time to check your math computations, review an essay for grammatical and content errors, or answer the difficult multiple-choice questions you skipped earlier. Finally, **make sure you have completed the entire test:** check the backs of pages, and verify that you have a corresponding answer section for every question section on the exam. It can be easy to skip a section with the idea you will come back to it but then forget to return there, which can have a significant impact on your test results.

After the Test

As you leave the exam room, the last thing you may want to think about is that particular test. You probably have numerous other assignments, projects, and life obligations to attend to, especially if you pushed some of those off to study for this completed exam. Give yourself some space from this exam, but only for the duration of the time when your instructor is grading your exam. Once you have your results, study them—whether you did really well (Go, you!) or not as well as you had hoped (Keep your spirits up!). Both scenarios hold valuable information if you will use it.

Consider this example: Thandie had a habit of going all-out for exams before she took them, and she did pretty well usually, but once the instructor passed back the graded tests, she would look at the letter grade, glance half-heartedly at the instructor's comments, and toss the exam away, ready to move on to the next chapter, section, or concept. A better plan would be to learn from her exam results and analyze both what she did well and where she struggled. After a particularly unimpressive exam outing in her statistics class, Thandie took her crumpled-up exam to the campus tutoring center, where the tutor reviewed the test with her section by section. Together they discovered that Thandie did particularly well on the computational sections, which she admitted were her favorites, and not well at all on the short-answer essay questions that she did not expect to find in a stats class, which in her experience had been more geared toward the mathematical side of solving statistical problems.

Going forward in this class, Thandie should practice writing out her explanations of how to compute the problems and talk to her instructor about ways to hone this skill. This tutoring session also proved to Thandie the benefit of holding on to important class papers—either electronically or in hard copy, depending on the class setup—for future reference. For some classes, you probably don't need to keep every scrap of paper (or file) associated with your notes, exams, assignments, and projects, but for others, especially for those in your major, those early class materials may come in very handy in your more difficult later undergraduate courses or even in grad school when you need a quick refresher on the basic concepts.

Test Anxiety

Figure 4.9 Test anxiety can be a common occurrence, but you can use strategies to manage it. (Credit: CUBoulder / flickr Attribution 2.0 Generic (CC-BY 2.0))

Test anxiety is very real. You may know this firsthand. Almost everyone gets a little nervous before a major exam, in the same way most people get slightly anxious meeting a new potential date or undertaking an unfamiliar activity. We second-guess whether we're ready for this leap, if we prepared adequately, or if we should postpone this potentially awkward situation. And in most situations, testing included, that reasonable level of nervous anticipation can be a good thing—enhancing your focus and providing you with a bit of

bravado to get you through a difficult time.

Test anxiety, however, can cause us to doubt ourselves so severely that we underperform or overcompensate to the point that we do not do well on the exam. Don't despair; you can still succeed if you suffer from test anxiety. The first step is to understand what it is and what it is not, and then to practice some simple strategies to cope with your anxious feelings relative to test taking. Whatever you do, don't use the label *test anxiety* to keep you from your dreams of completing your education and pursuing whatever career you have your eyes on. You are bigger than any anxiety.

Understanding Test Anxiety

If someone tries to tell you that test anxiety is *all in your head*, they're sort of right. Our thinking is a key element of anxiety of any sort. On the other hand, test anxiety can manifest itself in other parts of our bodies as well. You may feel queasy or light-headed if you are experiencing test anxiety. Your palms may sweat, or you may become suddenly very hot or very cold for no apparent reason. At its worst, test anxiety can cause its sufferers to experience several unpleasant conditions including nausea, diarrhea, and shortness of breath. Some people may feel as though they may throw up, faint, or have a heart attack, none of which would make going into a testing situation a pleasant idea. You can learn more about symptoms of test anxiety from the Anxiety and Depression Association of America that conducts research on this topic.[10]

Back to our minds for a minute. We think constantly, and if we have important events coming up, such as exams, but other significant events as well, we tend to think about them seemingly all the time. Almost as if we have a movie reel looping in our heads, we can anticipate everything that may happen during these events—both sensational results and catastrophic endings. What if you oversleep on the test day? What if you're hit by a bus on the way to campus? What if you get stung by a mysterious insect and have to save the world on the very day of your exam?

How about the other way? You win the lottery! Your screenplay is accepted by a major publisher! You get a multimillion-dollar record deal! It could happen. Typically, though, life falls somewhere in between those two extremes, unless you live in an action movie. Our minds, however, (perhaps influenced by some of those action movies or spy novels we've seen and read) often gravitate to those black-and-white, all-or-nothing results. Hence, we can become very nervous when we think about taking an exam because if we do really poorly, we think, we may have to face consequences as dire as dropping out of school or never graduating. Usually, this isn't going to happen, but we can literally make ourselves sick with anxiety if we dwell on those slight possibilities. You actually may encounter a few tests in your academic careers that are so important that you have to alter your other life plans temporarily, but truly, this is the exception, not the rule. Don't let the most extreme and severe result take over your thoughts. Prepare well and do your best, see where you land, and then go from there.

Using Strategies to Manage Test Anxiety

You have to work hard to control test anxiety so it does not take an unhealthy hold on you every time you face a test situation, which for many of you will last well into your careers. One of the best ways to control test anxiety is to be prepared for the exam. You can control that part. You can also learn effective relaxation techniques including controlled breathing, visualization, and meditation. Some of these practices work well even in the moment: at your test site, take a deep breath, close your eyes, and smile—just bringing positive thoughts into your mind can help you meet the challenges of taking an exam without anxiety taking over.

The tests in the corporate world or in other career fields may not look exactly like the ones you encounter in college, but professionals of all sorts take tests routinely. Again, being prepared helps reduce or eliminate this anxiety in all these situations. Think of a presentation or an explanation you have provided well numerous times—you likely are not going to feel anxious about this same presentation if asked to provide it again. That's

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10   Reteguiz, Jo-Ann. "Relationship between anxiety and standardized patient test performance in the medicine clerkship." Journal of general internal medicine vol. 21,5 (2006): 415-8. doi:10.1111/j.1525-1497.2006.00419.

because you are prepared and know what to expect. Try to replicate this feeling of preparation and confidence in your test-taking situations.

Many professions require participants to take frequent licensing exams to prove they are staying current in their rapidly changing work environments, including nursing, engineering, education, and architecture, as well as many other occupations. You have tools to take control of your thinking about tests. Better to face it head-on and let test anxiety know who's in charge!

4.5 Developing Metacognition

Estimated completion time: 8 minutes.

Questions to Consider:

- What is metacognition?
- What contributes to poor metacognition?
- What can you do to improve your metacognition and in turn your learning?

Consider this scenario: Marcus has studied for his chemistry test by rereading the chapters and looking at his notes. He has spent several hours the night before doing this and feels ready for the test. The concepts are not particularly difficult, but there is a lot to recall. When he takes the test, he feels pretty confident that he has earned at least an 80% (B). He isn't able to answer all the questions—and knows he could have studied longer—but he feels comfortable with his performance. When he gets the test back, he is surprised to learn he has earned a 54% (F). He has now realized that he didn't really understand the material well enough to answer the types of questions his professor included. *What happened to Marcus and what can he do differently next time?*

Deep learning, as described earlier in the chapter, is the goal you should be striving for in most if not all of your college classes. The learning process starts with taking in information—through reading, listening, or doing—organizing it in your brain for quick recall or use, and then demonstrating, usually through a test or assignment, that you know the information. However, learning doesn't end there. As you learn and demonstrate your knowledge, you will receive feedback to help you adjust your learning strategies or reflect the level of learning that has occurred.

Feedback can include the following:

- A grade on a test in which you can see what questions you got right and what you got wrong.
- Written feedback from an instructor or peer about what you have done well and what can be improved.
- Immediate feedback on a skill (such as playing a note on an instrument) that indicates you did it correctly or not.
- The ease or difficulty at which you can recall or explain information that you are learning.

This feedback is what you need to help you develop **metacognition,** which is the awareness of your own learning processes. When you have good metacognition, you can determine what you know and don't know. You are also able to adjust your learning strategies to improve. Without this feedback, whether it is formal (e.g., a test grade) or informal (you stumble over defining terms), you will have more difficulty improving your awareness.

In Marcus' case, he had poor metacognition because his study strategy, rereading the text and his notes and studying the night before, did not provide him with feedback on what he knew well and what he didn't. In fact, what Marcus did produced **fluency illusion,** which is the belief that you know something better than you really do. This fluency illusion occurred because he reread the material and that made him confident that he knew the content. However, Marcus had poor metacognition. Now that Marcus has more feedback from his test, he

can use that information to help him determine why he failed to learn the content well enough for the test.

Here are the steps for improving your metacognition so that you can adjust your thinking and study strategies for maximum benefit:

- Choose a study strategy or a combination of them such as the ones described in this chapter, but be sure to include testing yourself (e.g., practice tests, teaching someone else, trying to rewrite notes from memory).
- As you study, track what you are able to recall easily and what you still struggle with and focus on those areas.
- Take the test, complete the assignment, or perform the skill.
- Review the feedback you receive and examine it for what went well and what didn't.
- Make adjustments to your study strategies before the next assessment.

This feedback loop in which you use that information to make changes is *essential* to learning. If you don't look at the grade or feedback and hope to "work harder" next time, you likely won't be using the specific, effective, efficient learning strategies that could make a difference in the outcome and your grade.

Summary

Deepening your learning happens when you study effectively and prepare adequately for taking tests. Learning how to do these well can only help you be more successful. Additionally, this chapter discusses the role that metacognition plays in helping you improve your learning processes. This chapter has provided a variety of tools, strategies, tips and information about how to develop skills that will be most effective for your experience. You can help yourself by taking these guidelines seriously and tracking your progress. If one strategy works better for you in some classes and another is more suited to a different course, keep that in mind when you begin to study. Use all the resources available to you, and you'll be well on your way to success in college.

Studying and test taking skills often need to evolve to meet the needs of college expectations. Even if you have solid skills your first year, you will need to continue to develop, hone, and add to them. To that end, consider what else about developing your memory, honing your study strategies, practicing good test-taking skills, or improving your metacognition you would like to learn or practice. Choose one of the following to explore further this term:

- Develop a study plan that includes when, where, and how to study.
- Incorporate spacing, interleaving, and practice testing as study strategies.
- Eliminate test anxiety by implementing strategies to reduce stress.
- Monitor self-awareness of how well you are learning and what needs to change.

5 Building Relationships

Figure 5.1 Success in college and in later careers will require you to develop and maintain healthy and productive relationships with people in various roles and from a wide array of backgrounds. (Credit: AXIS Dance / Flickr Attribution 2.0 Generic (CC-BY 2.0))

Chapter Outline

5.1 The Benefits of Healthy Relationships
5.2 Building Relationships in College
5.3 Working in Groups

Introduction

Student Survey

How confident are you in building relationships and working with others in college? Take this quick survey to figure it out, ranking questions on a scale of 1–4, 1 meaning "least like me" and 4 meaning "most like me." These questions will help you determine how the chapter concepts relate to you right now. As you are introduced to new concepts and practices, it can be informative to reflect on how your understanding changes over time.

1. I set healthy boundaries when developing relationships.
2. I have gotten to know at least one professor well.
3. I have developed relationships with my peers in college.
4. I can work productively in groups.

You can also take the Chapter 5 survey (https://openstax.org/l/collegeconcisesurvey05) anonymously online.

STUDENT PROFILE

"For the vast majority of my life, I thought being an Asian-American—who went through the Palo Alto School District—meant that I was supposed to excel in academics. But, in reality, I did the opposite. I struggled through college, both in classes and in seeking experiences for my future. At first, I thought I was

unique in not living up to expectations. But as I met more people from all different backgrounds, I realized my challenges were not unique.

I began capturing videos of students sharing their educational issues. Like me, many of my peers lack the study skills required to achieve our academic goals. The more I researched and developed videos documenting this lack of skill, the more I realized that student identities are often lost as they learn according to a traditional pedagogy. I began documenting students' narratives and the specific strategies they used to overcome difficulty. Once we can celebrate a diverse student body and showcase their strengths and identities as well as the skills necessary to excel academically, my hope is that students of all backgrounds can begin to feel that they belong."

—**Henry Fan**, Foothill College and San Jose State University

About This Chapter

By the time you finish this chapter, you should be able to do the following:

- Determine the key components of healthy relationships
- Discuss steps for managing conflict in relationships.
- Develop a plan to maximize your relationships in college.
- Identify the steps for working effectively in a group.

Good relationships can mean the difference between an enjoyable college experience and a difficult one. Many students report within their first year that they have experienced loneliness or homesickness whether they live on campus or in another state or country or commute back and forth to college. The good news is that these states are temporary. With time, students who say they are lonely meet more people, get involved in study groups, and get to know their classmates and roommates better. The students who feel homesick or just miss their family, friends, and pets (yes, *pets*) also report that once the term gets busier with events, meetings, class work, and studying, they find that the homesickness goes away.

This is not to say that quality relationships don't take time or work to develop. In fact, you will want to be mindful of what you can do to start relationships and improve them to create a more enjoyable college experience. This chapter offers specific suggestions that can help you get the most out of living and working with others.

5.1 | The Benefits of Healthy Relationships

Estimated completion time: 21 minutes.

Questions to Consider:

- How does self-care benefit relationships?
- Why is community so important to healthy relationships?
- What can I do to start developing relationships?

Relationships are key to happy and healthy lives. According to Dr. Robert Waldinger, director of the Harvard Study of Adult Development, people with the best health outcomes were people who "leaned into relationships, with family, with friends, with community."[1]

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[1] https://www.cnbc.com/2018/03/20/this-harvard-study-reveals-how-you-can-be-happier-and-more-successful.html#:~:text=%E2%80%9COur%20study%20has%20shown%20that,said%20in%20the%20TED%20Talk.

Figure 5.2 Healthy relationships involve trust, respect, and support. (Credit: Garry Knight / Flickr / Attribution 2.0 Generic (CC-BY 2.0))

Relationships come in many forms: classmates, family, friends, partners, coworkers, team members, and neighbors. Think of a relationship where you have mutual respect and trust, supporting each other in tough times, celebrating the good times, and communicating with ease and honesty. This is a healthy relationship. Do you have someone in mind? On the other hand, if communication is often tense or strained, confidences are broken, or you don't feel listened to, appreciated, or valued, these are signs of an unhealthy relationship. Unhealthy relationships can have both immediate and longer-term health impacts. If you are unhappy in a relationship, try to improve the relationship, or end it. Do not stay in a relationship for the wrong reasons, such as fear of being alone or guilt.

If a partner tries to force you to do something sexually, harms you physically, or is verbally abusive, you are in a particularly unhealthy or dangerous relationship. Even if you believe the person loves you, it does not make up for the harm they are doing to you. End the relationship.

Take a moment to assess the health of your relationships. Who are the people who make you smile, who boost your confidence, who truly listen when you need to talk, and who want only the best for you? Investing in these relationships is likely to make you happier and healthier. Relationships are two-way streets. How committed are you to your relationships? How much effort do you put into nurturing your relationships?

Self-Care

Healthy relationships start with healthy individuals. Self-care is learning to take good care of yourself and to prioritize your own needs. Self-care involves any activity that nurtures and refuels you, such as taking a walk in the woods, going to a yoga class, attending a sporting event, reading a good book, or spending time with friends. When you are feeling calm and nourished, you are going to look forward to your day, and despite how busy it is, you will prioritize time with friends and family. If you don't take care of and learn to love yourself, you will never be able to bring your best self to any relationship.

An important dynamic you bring to any relationship is how you feel about yourself. Self-esteem is about loving yourself and being happy for who you are. Building healthy self-esteem impacts how you see yourself, which can drastically improve your relationships. While low self-esteem won't keep us from romantic love, it can act as a barrier to a healthy relationship. If you do not believe you are good enough, how can you expect your partner to think so?

When you feel secure in yourself, this allows you and your partner to feel more secure about the relationship. If you have insecurities, it may show in your relationship as jealousy, defensiveness, or tension that leads to unnecessary arguments. Healthy self-esteem goes hand in hand with self-confidence, and feeling confident about yourself will translate into a stronger and more satisfying relationship. If you are experiencing low self-esteem, you may give your partner too much credit or stay in a relationship that is not healthy for you. If you find yourself changing your personality for someone else, that is never a sign of a healthy relationship.

You can reverse negative self-talk and build your self-esteem. If you catch yourself thinking you are unlovable, unattractive, or not good enough, it's important to start talking to yourself in a positive way and to celebrate all that is uniquely you.

Self-care includes self-forgiveness. We all make mistakes. A misstep isn't the end of the world. Pick yourself up, put things in perspective, acknowledge any lessons to be learned, focus on all that makes you special, and move forward. Be kind to yourself.

The Importance of Community

The Nicoya Peninsula in Costa Rica is home to some of the highest number of centenarians (people who are 100 years old or older) in the world. Costa Ricans in general report a high level of life satisfaction. Dan Buettner, author of the Blue Zones study of the longest living populations in the world, explains that Costa Rica "is a place where religion, family, and social interaction are the main values, unlike trying to get ahead, or financial security, or status. Their cities are set up so they're bumping into each other all day long. They walk to the markets, where they have conversations with people."[2]

In many families in Costa Rica, multiple generations live together under the same roof or nearby where they can be involved in each other's lives. Neighbors are like extended family, and people often stop in for a visit and go out of their way to help one another.

While this isn't the way many of us live in the United States, the lessons from the Blue Zone study underscore the importance of community and the health benefits of connecting to and staying close to a community.

What communities do you belong to? Is your dorm a community? Is a sports team? Is a club or people you volunteer with? When you start seeing the social circles you connect to as communities and prioritize your time to develop more closeness with those communities, you will experience many physical, mental, and emotional health benefits.

Figure 5.3 Joining clubs in college can be an outstanding way to join and build communities. (Credit: SupportPDX, Cerritos College / Flickr / Attribution 2.0 Generic (CC-BY 2.0))

According to an analysis of research on college students (Joe Cuseo, *The Most Potent, Research-Based Principles of College Success*), college students who have a higher sense of belonging and are more involved in their college community are more successful. Additionally, college students who are involved in extracurricular, volunteer, and part-time work experiences outside the classroom (less than 20 hours per week) earn higher grades than students who do not get involved in any out-of-class activities at all.

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2   https://www.bluezones.com/2017/10/costa-rica-singapore-two-happiest-places-earth/

APPLICATION ✓

Make a list of the communities you belong to. Your list should include formal communities—for example, sports teams, fraternities or sororities, and membership in clubs and other organizations. Your list should also include informal communities—for example, your neighbors or the people you always see at your favorite exercise class.

Next to each community, write how being a member of this community benefits you and how your involvement benefits the community. Now, make a new list of your personal interests and passions. How well do these align with the communities you already belong to? Are there new communities that would be a good fit for you?

If you are struggling to identify communities you already belong to, think about your passions, causes you care about, and ways you love to spend your time. Find a group or club that aligns with your interests. If you can't find one that already exists, start a new club!

Research has shown that friends provide a sense of meaning or purpose in our lives, and that having a healthy social life is important to staying physically healthy. In a meta-analysis of the research results from 148 studies of over 300,000 participants, researchers found that social relationships are important in improving our lifespan. Social support has been linked to lower blood pressure and better immune system functioning. The meta-analysis also showed that social support operates on a continuum: the greater the extent of the relationships, the lower the health risks.[3]

According to a 2018 report from the American College Health Association, in a 12-month period, 63 percent of college students have felt very lonely.[4] If you are feeling lonely or having a hard time making friends, know that the majority of people around you have also felt this way. Joining a group or a club of people who share your interests and passions is one of the best ways to make great friends and stay connected.

ACTIVITY

Lisa Nunn's (2021) book *College Belonging: How First-Year and First-Generation College Students Navigate Campus Life* suggests that students experience belonging in three areas: academic belonging, social belonging, and campus-community belonging. Think about how you can take steps to feel as though you belong in each of these three categories and write down what you can do.

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3   Holt-Lunstad, *PLoS Medicine,* https://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1000316
4   American College Health Association. (2018). Fall 2018 reference group executive summary https://www.acha.org/documents/ncha/NCHA-II_Fall_2018_Reference_Group_Executive_Summary.pdf

Realm of Belonging	Description	Steps You Can Take to Enhance Your Belonging
Academic belonging	Feeling confident in your classes, asking and answering questions in class, engaging with professors within and outside of class	1. 2.
Social belonging	Finding friends with shared interests, participating in events and organizations, talking to new people	1. 2.
Campus-community	Feeling generally accepted by the institution, feeling supported and helped by the programs and people on campus who work to see that you succeed	1. 2.

Taking the First Step in a Relationship

Consider this scenario: John is a first-year student who has moved several hundred miles away from home to attend college. He is, by self-admission, shy and has difficulty making friends. When he steps into his first class for the term, he meets Praya, a second-year student who says "Hello" when he sits down next to her. She seems outgoing and engaged as she greets others in the class as if she has known them for a long time. He feels out of place.

"Hi, Haley. How was your internship over the summer?" Praya asks one student. She asks another student, "Breylin, how do we always have a class together?"

John sinks down in his seat, afraid she is going to ask him questions as well. He pulls out his phone and looks through social media to keep her from bothering him. As other students enter the class, some quiet and others talkative, John wonders if he will have to interact with them. Even though he has not met many people yet–and certainly has not had any deep conversations with anyone–he feels anxious about having to get to know strangers and feels most comfortable keeping to himself at least for now.

John's story is not unusual. As you read in the previous section, many first-year college students have difficulty developing relationships in the first few weeks and months of college. The issue is often exacerbated by the constant notifications and vibrations that come from phones, which pull us out of conversations with others.

One way to improve your relationship-building skills is to learn the art of small talk, which is the first step in getting to know someone more deeply. Because we often turn to our phones or other distractions when faced with interacting with strangers – or even people we know well – it is no surprise that we haven't quite developed solid communication skills. If you want to get more involved in campus organizations, feel more comfortable in your classes, and eliminate general awkwardness in most social situations, then practice small talk skills.

What can you "small talk" about? Here are some topics that could get you started.

- The weather–"Wow, the cooler temperatures were a surprise this morning. Are you ready for the snow?"
- The latest sporting event–"How about our Bears? I can't believe they won in the final seconds of the game."
- Plans for the weekend–"Did you hear about that Halloween party in the park? Have you thought about going?"

- The current trend on social media–"Did you see that challenge on TikTok?"
- Majors–"What are you majoring in?" or "Are you a marketing major?"
- Careers–"What kind of job are you anticipating after graduation?"
- Schedule–"What are you taking this term? Anything you recommend?"
- Organizations–"I have been thinking about joining an organization. What are you participating in?"
- Recreation–"I got to play a new video game last weekend. Are you a gamer?"
- The class–"I struggled with that homework last night. Was it hard for you?"

Of course, tried-and-true compliments work as well as long as you keep them neutral. Admiring someone's clothing ("Great hoodie! Where did you get that?") or course resources ("Nice laptop. Do you like using it?") are safe bets. If you are not sure if you should ask the question or bring up the topic because you are concerned it may be controversial or not taken in the right way, then go with your instinct and choose something from the list above. Once you get to know people better, you can have deeper and more meaningful conversations.

One last note about "small talk." If you struggle with being friendly with others or coming up with something to say in those uncomfortable moments, then commit to practicing your small talk skills. Look for times during the day to try them out such as before class starts, when you are waiting in line, or when you attend an event and don't know many people. With practice, it gets easier to talk to people you don't know well. And, who knows? You may find someone who can become a friend.

GET CONNECTED

Which apps and websites help you get more comfortable developing relationships?

- Do you want to meet people who have similar interests? Meetup (https://openstax.org/l/meetup) provides you the opportunity to create interest groups based on your location. You can use the app to create online or in-person groups.
- Do you want to learn how to start conversations and have fun doing it? Apps such as Real Talk, Make Talk, and Holsom can make starting conversations enjoyable. Learn what kinds of questions to ask that can get people talking and talking and talking.
- How about training in conflict management? Colorado State's Conflict Resolution for College Students (https://openstax.org/l/conflictmanagement) provides an in-depth course that explores common reasons for conflict and common experiences that college students may encounter and need to manage.

5.2 Building Relationships in College

Estimated completion time: 18 minutes.

Questions to Consider:

- What role will faculty play in my college experience?
- What other kinds of relationships do I need to develop?

Figure 5.4 provides an overview of the types of relationships you will develop in college. If you are aged 18- or

19-years old (often referred to as traditional college student age), you may look forward to expanding your relationship types beyond family and friends and authority figures to classmates (those who are in your classes), peers (those who are in college or near your age and have similar goals and activities), mentors (those who can help you develop skills or goals), and authority figures (those who direct and evaluate your work). If you are older than the traditional college student, you may also find that your circle of friends and colleagues will expand in some areas–and may even contract in others, at least while you are earning a degree.

Some people, such as professors, may fill multiple roles at different times in your college career. For example, a professor of your first-year seminar may be seen as an authority figure who dictates the learning objectives, creates assignments, and evaluates you. That same professor may become a mentor when you take them again your junior year as you are working on your major or participating in undergraduate research with them. Finally, your professor can become a friend after you graduate, especially if you have developed a bond with them that transcends the work you did together.
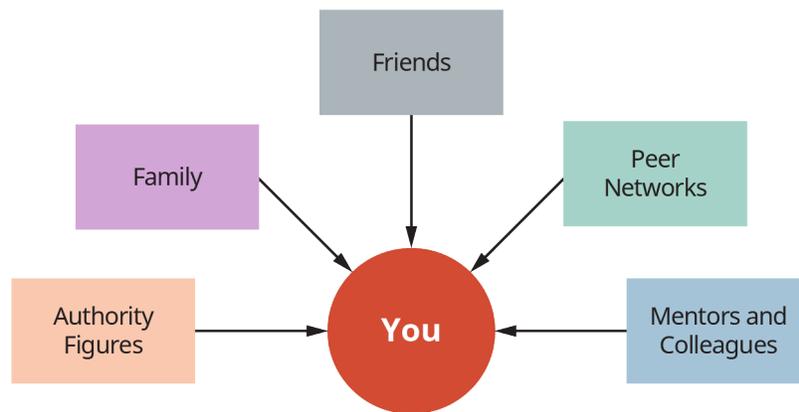
Figure 5.4 You and Your Relationships During College

Because professors are an important part of the college experience, we will talk first about them and how to develop good relationships with them.

What Professors Do

Professors are more than just teachers. This may be a surprise if you think about your experiences with high school teachers where they have their own classroom and a set of responsibilities including leading their classes that they must do between set hours each day of the week. College professors, by contrast, have much more flexibility and autonomy in their schedules, their workload, and their responsibilities outside of class. Because of these differences, you will want to view them in light of their additional roles and activities. See the table for a breakdown of common responsibilities professors have.

Role or Responsibility	Why It Is Helpful for You to Know
Teaching	This is an obvious role, but it may be helpful to know that professors may be more focused on providing you with the latest knowledge in their field rather than the most innovative learning activity. You will be responsible for learning the material.
Researching	Many professors conduct original research as part of their job responsibilities. In some cases, they may focus most of their time on research. This may be helpful to know because you may want to consider participating in research with a professor as part of your college experience.

Role or Responsibility	Why It Is Helpful for You to Know
Writing and Presenting	When professors do research, they often write articles and present their findings. This means that they may also expect that their students write and present frequently and proficiently in their classes.
Mentoring Students	Professors may serve informally or formally as mentors to students at any time during your college career. This may be helpful to know as you identify people in your network who can serve as supporters of your success.
Participating in Shared Governance	Another key component of a professor's job is to serve on committees at the institution and participate in shared governance. Shared governance is the use of processes and structures to allow faculty, staff, and students to have a say in decision making on campus. Professors often spend considerable time in committee meetings reviewing data, evaluating policies and programs, and creating solutions to campus problems.
Participating in state, regional, national, or international organizations related to their discipline	Professors often have roles and responsibilities beyond the work they do at your institution. They may serve on a board or participate in an organization dedicated to sharing their research or working on a national issue. Knowing that your professors have connections and influence beyond the work they do to teach their students can provide more insight into why their schedules are often busy.
Working other positions or in business and industry	Adjunct professors, or faculty who teach part-time, may have limited office hours to meet with students because they teach classes at other institutions or hold jobs outside of academia.

Developing Relationships with Professors

Because your relationship with your professors is often the most visible and critical one to your learning and success in college, it is important that you take time to get to know your professors or at least remember their names, recognize them when you see them outside of class, and work diligently to meet their expectations. No one expects you to be best friends with them by the end of the semester, but you do want to view them differently than you may have viewed your high school teachers–as experts in their fields, partners in your learning, and mentors as you move through your degree. Here are a few ways that you can initiate and develop a relationship with your professors:

- **Get to know your professors.** This means to learn their names and something about them. They may share a few personal stories or you may be able to view their resume (often called a CV or *curriculum vitae*), which will list their education and publications. It also means showing up early or staying after class to participate in small talk or stopping by their office hours to talk or schedule a time with them to connect virtually..
- **Demonstrate interest.** You don't have to love the course, topic, or professor to demonstrate curiosity and focus in class. Nod when you agree or understand something or smile at your professor when they make a joke. You may find that pretending to be interested at first leads to genuine interest.

- **Participate in class.** One of the best ways to develop a positive relationship with your professor is to ask and answer questions in class. Engaging in a class discussion demonstrates interest in the topic and can go a long way in helping you stand out. If you don't feel comfortable speaking up in class, schedule a meeting outside of class to discuss key ideas.
- **Ask about expectations and assignments.** A great strategy that is underutilized is meeting with a professor *before* a test or assignment to ask about the expectations or to get clarification. In some cases, your professor may provide feedback on a draft or suggestions for studying.
- **Speak up when you stumble or fail.** Contrary to some college students' beliefs, professors *want* to talk to you when you fail a test or get a low grade because you misunderstood or procrastinated. Speak up when this happens even if you know well what contributed to your setback. Professors like to see that students are invested in their learning and improving.
- **Say "thank you."** If a professor gives you an extension on your paper or you just enjoyed the class, feel free to show some gratitude. Saying "Thank you for helping me conquer my math anxiety" or "I learned so much this semester" can go a long way toward building a relationship. And professors never get tired of students who are truly appreciative of their work.

As you read earlier in this section, professors have many different responsibilities in addition to teaching; however, they find joy and purpose in developing relationships with students who are engaged in their learning. While you don't have to be on a first-name basis with all your professors by the time you graduate, you should consider identifying a few who have sparked your interest in their courses or research to get to know them better. It would be a shame to graduate and not be able to recall one professor you had!

Managing Conflict with a Professor

Now that you know how to develop a meaningful connection with your professors, let's address how to deal with some common issues that can arise and how to communicate clearly and professionally. While college is often portrayed as freedom, exploration, and fun, there may be a time (or multiple times) that is stressful or discouraging. These times can occur when you are not happy with an assignment, classmate, discussion topic, a response to something you did or did not do, feedback on your work, or a grade. Any time you find yourself worried, upset, or angry about an event or experience with a professor, take these steps so that you can resolve the issue quickly and positively.

Step 1. Take a deep breath and write down what happened. Do this before you speak to your professor. Both activities, breathing and writing, will help you calm down and focus. It will also help you gather your thoughts.

Step 2. Make an appointment with your professor. Don't try to resolve the issue before, during, or after class as those are not ideal times to talk about an important issue unless it is the only availability you and the professor have. Explain why you want to meet to help the professor prepare. This is especially helpful if you have received a low grade as your professor may want to review the assignment or test beforehand.

Step 3. Explain the issue as clearly as possible. This is where the written account may help. Focus on what you experienced, heard, or read. Here is an example of a statement about a classmate's rude behavior that a professor would want to know: "When I spoke up in class about the need for more resources for immigrants, my classmate said under his breath 'They should just go back to where they belong. I don't know why you care.'"

Step 4. Share how you felt about the event. It is important to acknowledge your emotions, but you don't have to dwell on them. They will, however, provide some context as to why you feel the issue needs to be resolved. Here is an example: "I was surprised when Jarod said that when I was speaking and it made me mad that he would interrupt me with such a statement."

Step 5. Provide a potential solution or ask for assistance resolving the issue. The phrases "Can you help me understand...?" and "Can you help me resolve this issue?" are both good ways to frame this part of the

process when speaking to your professor. Be prepared to listen, take notes, and make a list of steps you can take.

A special word about resolving issues with grades, especially final grades. Your professors are human and may make mistakes as they grade and return your work. While it may be a rare occurrence, it is worth discussing what to do if this happens. Here are a few suggestions to help you resolve questions about grades.

- Reach out as soon as you notice a grade that is lower than expected. Don't wait until the end of the term to question a grade from months earlier.
- If it is a grade on an assignment or test during the term, request a meeting in person or carefully ask in an email if you can get additional information about what you did or didn't do that contributed to the grade.
- If it is a final grade, reach out in person, by phone, or email, but be sure to follow these guidelines:
  - Provide your name; student identification number (if needed); the course name, number, and day/time if you are leaving a message or emailing about the grade.
  - Ask if there has been a calculation error if the grade is lower than you expected.
  - Do not beg, whine, or threaten if the grade is lower than you *wanted*, but what you *earned*. If you did not complete assignments on time, follow directions, or submit quality work, then your professor is not obligated to give you a higher grade.

As with all your relationships in college, think about them in terms of building your network that will help you throughout college and after graduation. While you cannot avoid conflict–or bad experiences–you can manage how you respond to them and how you work with others, especially professors, to resolve issues.

ACTIVITY

Directions: Emailing a professor about a failing or low grade can be difficult. Consider the two emails below and determine their strengths and weaknesses. Then, write your own email that includes the best strategies that are discussed in the section titled Managing Conflict with a Professor.

Email 1

TO: ajames@college.edu

FROM: rjenkins@college.edu

SUBJ: (no subject)

Hey! Why did you give me an F in your course? I thought I would get a C because I turned everything in. Can you email me back and explain?

Rob

Email 2

TO: ajames@college.edu

FROM: rjenkins@college.edu

SUBJ: Question about Final Grade: R Jenkins Student ID 0325

Prof. James,

I am in your CSCI 1401 Computer Science course on MWF at 9:00 and noticed that my final grade was a 79, but I had it calculated as an 82 after you graded the last project. Can you let me know if this is an error or if

I calculated incorrectly? If it is easier to talk by phone or in person, let me know and I will provide some times and my phone number.

Rob Jenkins

Your Email

Write an email to a professor in which you ask about a grade that is lower than you expected.

Developing Relationships with Others

In addition to developing relationships with professors, you will encounter a variety of people in different roles that are part of a fulfilling experience. Don't overlook the opportunity to create deep, meaningful relationships with others as they will be part of your network for support during college. Here are some categories of people you will want to create intentional relationships with and what they can do to help you succeed in college.

- **Classmates.** It seems obvious that you want to develop relationships with people in your classes, but many students overlook their fellow colleagues as potential friends or support networks. Classmates can help you learn the material when they serve as tutors or study buddies, and they can be an emotional support when you suffer a setback in a course.
- **Roommates.** If you live on campus or away from home in off-campus housing, you may have a roommate. A roommate can also become a good friend who can make you feel more at home while you are away from your family.
- **Peers.** Your peers are people who are other students who populate the college campus. You will encounter them when you join organizations, attend events, or use certain services on campus such as tutoring. Many colleges employ fellow college students on campus to manage a residential hall, serve food in the cafeteria, and hand out sports equipment at the gym. Your peers also run organizations such as clubs, professional-interest meetings, and Greek fraternities and sororities. Developing relationships with your peers can help you expand your network and create connections with people who you may find helpful when you launch your career.
- **Mentors.** Many colleges provide opportunities for students to participate in mentorship programs. Your institution may have formal and informal programs that you can participate in to be mentored by a peer, a faculty or staff member, or even an alumnus in a career field that interests you. Mentors can provide you with advice and support as you work on your college and career goals.
- **Advisors.** While there are many different roles on a college campus that could be included in this list, advisors deserve a special place because they are crucial to your success; they are also the first place to go when a student has an issue. Some advisors spend considerable time with students to help them choose a major and create a schedule each semester that will enable them to graduate. Others serve as a sounding board for students who are struggling in a class and deciding whether or not to drop. Developing a relationship with your advisor has obvious benefits: They get to know what your goals are and can help you refine them. They also are very knowledgeable about how to navigate the processes of completing a degree.

Figure 5.5 Even if you choose your own roommate, managing the relationship can be challenging and involve compromise. You'll need to figure out when you study, which items you share, and how close a friendship you'll have. (Credit: Residorm Mugla Attribution 2.0 Generic (CC-BY 2.0))

Developing quality relationships takes time, effort, and intentionality, but the rewards are many. Consider expanding your network each semester you are in college so that you have a rich, diverse group of people whom you know and can count on to help you reach your goals.

ANALYSIS QUESTION

Are there any relationships from the list above that will be easier for you to develop? Are there any that will be harder to develop? What do you think will be your biggest challenge in creating a network while you are in college? What can you do to create a network that includes a variety of different people in it?

Addressing Family Matters

A discussion about relationships while you are in college would not be complete without mentioning family (and even friends). For many students, the support they receive from family is key to their feelings of stability and support. However, there may be times that you experience tension or confusion with your family. Pressures arise from differences in experience or perspective, the financial aspects of college, and simply undergoing an evolution in your relationship. You may notice that your emotionally-supportive family is unable to help you navigate the college experience or give advice about what you should do. Other students may experience conflict when they choose a major or career pathway that goes against the wishes or expectations of family members. Finally, college students with children (or younger family members they care for) often feel overwhelmed when balancing their responsibilities; they may at the same time experience guilt or disappointment due to time spent away from the kids. Here are some times in which you may find that dealing with family can be difficult.

- **When you leave the family to attend college.** Moving out can challenge a family if they expect or wish that you were still part of their day-to-day activities.
- **During holidays and breaks.** Adapting to the schedule of the family can be challenging after your freedom to come and go (and go to bed and get up) when you want to.
- **When you experience a failure or setback.** Letting your family know you failed a test or a course or didn't get accepted in a program may concern them.
- **When you decide on a college major.** Choosing a major they are not familiar with or they worry won't lead to a specific job after college can contribute to their anxiety about your success.

- **When you decide to continue your education beyond your undergraduate degree.** Deciding to take on more debt or take longer to be "done" with your education can cause worry about your future.
- **When you choose a career pathway.** Choosing a career that they are not familiar with or do not approve of can cause stress in your relationship.
- **When you choose to participate in another experience rather than return home.** Choosing a different experience (such as studying abroad) instead of going back home could make them feel left out of your life.
- **If you decide to stop out, drop out, or transfer.** Making a major decision that can have emotional and financial implications can upset your family if they have a firm belief in what you *should* do.

While it may seem obvious, it is worth stating this clearly: Your life is *your* life and the choices you make should be the ones you want to make. This may be difficult to do if your family is relying on you or you are relying on them for financial or emotional support. Honest conversations about what you want to do with your life and how you want to get there are always good first steps in managing any potential conflict. You may also want to keep in mind a few of these opportunities for you to help them understand your experience:

- **Keep the lines of communication open.** Clear communication about what you are studying, what you like and don't like, and how you are changing can head off surprises should you find that what you *thought* you wanted to study and what you thought you wanted to do with your life changes. If you experience a setback or a failure, be honest about it and demonstrate how you will get back on track.
- **Share with them some of your experiences.** While you don't have to recreate the lecture that blew your mind, you can share what you are learning or doing that is exciting you and developing your curiosity or purpose.
- **Assure them of the support you are receiving from your network.** Most families worry when they are unsure of how you are making major life decisions. Let them know what resources, offices, and people are providing advice and support as you move through college. If you change your major after talking with your advisor and reviewing what you need to do to still graduate on time, let your family know!
- **Let go of your expectations.** In some cases, your family may just not understand because they haven't gone to college or they have not experienced what you have. You may just need to let go of the expectation that they will be able to provide the type of support that you want or need.
- **Create boundaries.** If you feel as though your family is overstepping their role in your life decisions, set clear, firm boundaries about what help or advice you will and will not accept. Creating boundaries is part of every healthy relationship and parents and family members should be no different. If you have to decide that you cannot discuss your career plans with your family because the conversation devolves into shouting, then you must create boundaries to protect your mental health.

5.3 Working in Groups

Estimated completion time: 18 minutes.

Questions to Consider:

- What are the benefits of working in groups?
- What can I do to work effectively in a group?

Benefits of Working in Groups

When a professor assigns group work, most students initially cringe because they have had poor experiences collaborating on a project. Many of them have tales of group members who didn't contribute equally or who disappeared altogether. It is no wonder that a popular meme includes a photo of a casket being lowered into the ground with the words "When I die, I want my group members to lower me into my grave so they can let

me down one last time." We can laugh at this extreme reaction, but there is some truth in feeling apprehension about being disappointed by others. This section makes the case that if you know more about how group dynamics can and should work and how to communicate effectively during the process of completing a group project, you are more likely to have a positive – or successful – experience.

Figure 5.6 Group work will be an important and sometimes high-stakes aspect of many classes and perhaps entire programs. Understanding group work requirements and dynamics, particularly in different learning environments, is important for success. (Credit: Residorm Mugla Attribution 2.0 Generic (CC-BY 2.0))

Why do professors assign group projects if they are often fraught with challenges? Perhaps it is because group projects are probably the most "real world" experience you will do in college. Very rarely will you be asked to create a report, present to a client, develop a new product or treatment, or fix a problem without working with others and depending on them to do their parts in a timely and professional manner. The more practice you have developing your own skills as a group member and troubleshooting when things don't go smoothly, the more nimble you will be when you have to collaborate in your job.

If you approach working in groups by anticipating the challenges and developing strategies to minimize their negative impact, you will be able to weather the stresses more successfully. Table 5.1 provides some common challenges that you may experience working in a group and reviews the strategies you can use to minimize or eliminate the challenges.

Challenges of Group Work	Strategies for Improving Group Work
Your grade may be dependent on the quality of others' work.	Divide the assignment into parts, assign everyone a role that plays upon their strengths, and communicate expectations on quality.
You have to wait for others to complete their work before you can finish the assignment.	Create clear due dates for your group and monitor everyone's progress on the project components.

Table 5.1 Challenges of and Strategies for Improving Group Work

Challenges of Group Work	Strategies for Improving Group Work
You have to trust that others will fulfill their commitment to do their part of the assignment.	Create a group Code of Ethics or Shared Expectations document that outlines what each group member agrees to do.
Group members don't show up or do not respond to communication.	Develop guidelines regarding missed meetings or lack of communication and implement consequences.

Table 5.1 Challenges of and Strategies for Improving Group Work

Understanding Group Dynamics

One way to improve your work in groups is to learn more about group dynamics and stages. Bruce Tuckman[5] (1965) developed a model of group development. His initial four phases are forming, storming, norming and performing. In the **forming** phase, group members learn more about the task they must complete as well as getting to know each other. For the most part, members act and think individually and may be polite or quiet when trying to make decisions about what needs to be done. Group conflict arises in the **storming** phase when roles are assigned and a leader emerges. Some members may not voice their concerns and suffer from internal (and unexpressed) conflict while others may openly argue about what needs to be done. Groups may skip this phase altogether if communication is clear and roles are assigned to interest and strengths. The next phase is **norming**, or when group members work collectively to help each other achieve their goal. Members are aware of how their part fits into the whole and are mindful of supporting each other. The last phase is **performing** and is marked by members' competence and confidence to complete goals.

Some groups revert to previous phases when there is unresolved conflict or when communication breaks down. The goal of group work is not to have a conflict-free experience, but to learn how to negotiate challenges, concerns, and changes during the process. When group members set common goals, create clear expectations, and communicate regularly, they are less likely to experience insurmountable obstacles.
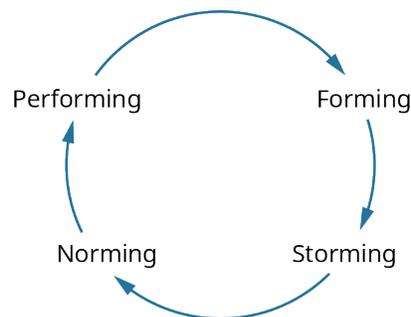
Figure 5.7 Tuckman's (1965) Model of Group Development

Setting Up Your Group for Success

Review Assignment

If we use the Tuckman (1965) model, we can anticipate the steps for creating a successful group. First, review the assignment and ensure that everyone understands the scope of the work, especially the expectations of the final product. Take some time to discuss what the parts of the assignment are and what the expected outcome should be. Will you be writing a paper? Will you be presenting original research? Will you need special equipment, technology, or software to complete the project? Get clarity on the assignment before you get too far into the work.

5   Tuckman, Bruce W (1965). "Developmental sequence in small groups". Psychological Bulletin. **63** (6): 384–399. doi:10.1037/h0022100. PMID 14314073.

Choose Roles

Next, your group should determine roles. You may want to first determine the leader, or you may decide to share leadership between two members or choose a "second in command" should the leader not be able to fulfill the duties. Then, you will need to set roles and responsibilities for everyone else in the group. Be sure to discuss each other's strengths, weaknesses, and interests. Different types of group projects call for different roles, so you may need to pick and choose what is appropriate for your project. Table 5.2 provides examples of roles and responsibilities that you may consider when assigning roles.

Role	Responsibilities
Leader	Ensures that everyone in the group works towards the objectives of the assignment and stays on task.
Recorder/ Secretary	Takes notes and shares them with the group. Keeps track of the work that is completed.
Critic/ Evaluator	Provides feedback and evaluation on work. May also play "devil's advocate" when discussing ideas.
Specialist	Uses strengths to take charge of one aspect of the project. Is responsible for coordinating with other specialists or the leader to meet group goals.
Task Leader/ Timekeeper	Ensures that deadlines are met. Reorganizes work or renegotiates timelines if needed.
Energizer	Keeps the group's energy high to complete the work.
Completer/ Finisher	Checks the work against the assignment or evaluation rubric to make sure all parts are completed correctly. May also serve as a proofreader/editor.

Table 5.2 Roles and Responsibilities for Group Members

Create a Communication Plan

When you have assigned roles and responsibilities, your group should create a communication plan. Because college students have different schedules and obligations, you will find that a strong communication plan can make working together easier. You may find that you need to work asynchronously, or not at the same time, and clear communication expectations will help your group both in person and online run smoothly. Here are some questions to guide your communication plan:

- How will the group communicate primarily?
- What will be the back-up communication strategy?
- What will you do if a group member doesn't respond to or acknowledge messages?

If group members do not want to share personal phone numbers, then consider using email or a shared drive folder to message each other.

Write a Group Contract

To ensure that all members uphold their responsibilities, create a contract that lists all the expectations for the group. You can use a template or create your own based on the group members' roles, dynamics, and assignment requirements. A group contract can be helpful in managing conflict and directing group members

should someone not do their part. Here are the components you will want to consider and an example below of a contract:

1. **Assignment reminders.** Include a description of the goal or project and the final deadline.
2. **General expectations or guiding principles.** Provide a list of general expectations or principles that will guide a successful group. For example, you may determine that acting respectfully, communicating honestly, and giving full effort are important group principles.
3. **Specific expectations or tasks.** List expectations about communicating, delegating, meeting, completing tasks, and managing conflict.
4. **Group members' signatures.** Include signatures or initials of the group members to underscore the importance of the contract.

Group Work Contract

Assignment: Information literacy source evaluations and slide presentation on the following topic:
<u>For-Profit Prisons</u>

Due date: Friday, April 12

Guiding Principles: The group members commit to the following principles:

- Each member will participate fully in each meeting
- Each member will do their best work
- Each member will ask for help if they are unable to complete their task on time
- Each member will seek to resolve conflicts as soon as they arise
- Each member will communicate promptly and honestly and professionally
- Each member will adhere to academic integrity principles

Each member will initial each statement below as an indication that they understand and will abide by these commitments.

1. Each member agrees to attend all meetings in person or online on time and for the duration of the meeting.
2. If a member is late or misses part of the meeting, they will [insert consequence].
3. If a member cheats or plagiarizes, they will be reported to the professor.
4. Each member agrees to complete all work on time and to the best of their ability.
5. If a member does not complete work or submits work late, they will [insert consequence].
6. Each member agrees to listen actively and communicate clearly and professionally.
7. If a member acts unprofessionally or contributes to a conflict, they will [insert consequence].

Date: _____

Print Name:
Signature:

Print Name:
Signature:

Print Name:
Signature:

Print Name:
Signature:

Figure 5.8 Sample Group Work Contract

APPLICATION ✓

You have been assigned a group project in which you and three classmates must research the topic For-Profit Prisons over the next two weeks. For the assignment, your group must find 4 academic journals, two of which argue for and two which argue against for-profit prisons as necessary for managing the criminal population, and read them carefully. Using the 4 academic journals, your group will be writing a 3-page summary of the pro and con sides of the topic and creating a 6-slide presentation that shares the key highlights of each source. Create a contract for your group by assigning roles, developing a communication plan, and writing down key milestones to complete your assignment on time.

Roles: What roles will each of you play in the group? Consider the tasks that must be completed to determine what roles you need.

Group Member	Role	Responsibilities
Ex: Group Member 1	Researcher	Search the topic in the library database. Find 4 articles (2 pro and 2 con). Assign each member an article to read.

Communication Plan: How will the group communicate throughout the project? Consider creating a back-up plan.

Communication Plan	Expectations
Ex: We will use Group Me for scheduling meeting times and to provide updates	Each member will respond via Group Me when asked questions about meeting times or updates on their part of the project.

Key Milestones: How will you plan out the work and keep everyone on track? Be sure to include time to proofread, edit, and practice for the presentation.

Task	Person Responsible	Deadline
Ex: Choose articles to use for the project	*Researcher*	*No later than February 12*

Managing Conflict in Groups

Conflict during group work does not have to be inevitable. With proper planning, clear roles and responsibilities, and a communication plan, your group can minimize a majority of issues that can arise. However, it is important to recognize what kinds of conflict can derail group work and review what steps you can take to get back on course. Here are a few examples of common conflicts:

- **No leader.** When no leader emerges, it may be difficult to move forward. If this happens, each member may need to take a specific task and assume responsibility for that task. Group members who are not comfortable being the leader may also feel more comfortable with co-leaders.
- **Too many leaders.** Many people with good ideas can derail a group project. If there are too many people vying to influence the group's direction, ask all group members to speak openly about the conflict. The group may want to vote on who should assume the leadership positions or what direction the group should take if there are more than one good option.
- **Aggressiveness or hostility.** A group member who tries to take over the project or is openly hostile during the process can make the experience miserable for everyone involved. The leader should take action immediately when the issue arises by clearly naming the behavior, avoiding emotional language, asking the reasons behind the anger, and communicating a plan to move forward with the project. This may mean assigning the member to a specific and limited role, or, in extreme situations, removing (or asking to remove) the member from the group.
- **Lack of communication.** A group member who never responds to messages or who communicates inconsistently can make completing a group project very difficult. The leader should go back to the group contract and reach out to the member, preferably in writing, and describe the missing communication, the tasks that have not been completed, and what the group will be doing to move forward without the group member. Even if the group member never reads or responds to the message, the group will have evidence that they attempted to reach out.
- **Overpromising and underperforming.** A group member that takes on tasks, promises to do them well and on time, and consistently misses the mark should be talked with about the lack of work. A group member may need to take on their responsibilities to meet the deadline.
- **Low work quality.** If a member is not completing quality work, the group leader should step in to work with the other members to revise or edit the work, but the group should communicate with the member as to what has changed and why.

Most conflict occurs when there is a lack of communication about what is expected. Providing your group members with examples of how to deliver bad or difficult news (e.g., "I am not able to meet my deadline" or "I think I need help with my tasks") can help your members feel more comfortable when it does occur. Be sure to

treat others respectfully and with kindness even if you are justifiably frustrated by your group members' actions or inactions.

APPLICATION ✓

Your classmate Garth shows up for the in-person meetings, but has yet to complete any of his parts for the project. The rest of your group cannot move forward without his finished work, and you are getting nervous that your classmate's unfinished work will keep you from successfully completing the project on time. Write Garth a clear and kind message in which you explain what has happened from your observation, what you need from your classmate, when you need their work, and the consequence of their not completing their work by the deadline.

Dear Garth,

Completing the Project

The project is complete when all the steps have been taken to submit or present it successfully, but that is not the end of the group work. You will want to also debrief on what worked and what could have been improved. Consider calling a brief meeting to review the process of completing the project or to review your graded work. Ask your group members what they felt were the group's strengths and weaknesses. Use the debriefing to think about how to make changes to the process the next time you work in a group. Spend some time reflecting on what skills you still need to improve and how you can make the most of future group work.

Summary

Developing healthy relationships and expanding your network of support are both important tasks for you to do in college. Without these relationships, your experience may be lackluster at best and lonely and difficult at worst. The first step to creating meaningful connections is to be healthy yourself and acknowledging the importance of community. There are also some ways you can jumpstart a relationship by improving your "small talk" skills. You will develop many relationships with different people while you are in college, but one of the most important is with your professors. Be sure to find ways to connect with them in and out of class. You will also want to be mindful of connecting with classmates, peers, mentors, and advisors as they will all be important to your network for success and support. Finally, there is no better way to really get to know others than when you work with them to complete a goal or a project. While group work strikes fear in some students, it doesn't have to be a conflict-ridden endeavor. Consider what you can do to anticipate challenges and make the process as smooth as possible.

To make the most of the relationships that you will develop or strengthen, consider what else about relationships and working with others that you would like to improve. Choose one of the following to explore further this term:

- Create a self-care routine that you incorporate into your weekly tasks. Read, watch, or listen to articles, books, videos, and podcasts about self-awareness, self-reflection, mindfulness, and stress reduction. These resources can help you build your self-care toolkit.
- Find ways to connect to your community through organizations, clubs, events, and volunteer opportunities. Work on developing a solid sense of belonging academically, socially, and campuswide.
- Get to know at least one professor this term and begin to build your support network of classmates, peers, mentors, and advisors. Commit to reaching out to people to begin developing relationships.
- Talk with your family and friends about what kinds of support you would like from them while you are in college. Be clear about your needs.
- Create a system for managing group work that includes assigning roles, setting goals, and developing communication expectations.

Figure 6.1 Spending time in nature is just one way to relieve stress, reconnect, and refocus. (Credit: GlacierNPS / Flickr Public Domain (CC-0))

6 Maintaining Your Mental Health and Managing Stress

Chapter Outline

6.1 Creating Your Best Self
6.2 Your Overall Well-Being
6.3 The Mind-Body Connection
6.4 Mental Health Basics
6.5 The Role of Social Media on Mental Health
6.6 Physical Health Basics

Introduction

Student Survey

How do you feel about your overall health and well-being? These questions will help you determine how the chapter concepts relate to you right now. As we are introduced to new concepts and practices, it can be informative to reflect on how your understanding changes over time. Take this quick survey to figure it out, ranking questions on a scale of 1–4, 1 meaning "least like me" and 4 meaning "most like me."

1. I can manage my emotions most of the time.
2. I can reduce stress when it is negatively affecting me.
3. I feel comfortable seeking out help when needed.
4. I get enough sleep.

You can also take the Chapter 6 survey (https://openstax.org/l/collegeconcisesurvey06) anonymously online.

STUDENT PROFILE

"My freshman year of college, I started at a pretty big university. I had what some call "social anxiety" and

even cried before getting out of the car on my first day. That year was a struggle for me, and I constantly had to fight with myself to step out of my comfort zone in order to succeed. I knew that if I made positive changes to my life then I would easily succeed in school. I joined a group of students who were a support system for me during my first year of college. Together we studied together and even worked out together. It helped me be more involved on my campus and less worried. Being connected with other students has taught me a lot of ways to cope with common problems many students face.

My first advice would be first and foremost, always make sure you are being kind to yourself. It's not advisable to work 40 hours a week and also try to be a full time student. You need to set up a realistic home and school life so that way you are balanced with your assignments and other responsibilities. You need to give your body and your brain time to rest so you can absorb as much as you want to without restrictions. I found it useful to start working out to make sure that I'm dedicating the time I should be to myself and not working myself until exhaustion. Little things like exercise, yoga and meditation can do amazing things for your body as well as your mind. If you take care of your body, your body will take care of you."

–**Felicia Santiago**, Delgado Community College

About This Chapter

This chapter explores the many ways your health and well-being may be impacted by the choices you make. The goal of this material is to help you do the following:

- Understand how your mindset influences your emotions.
- Identify strategies to manage your moods.
- Describe differences between stress versus anxiety and sadness versus depression.
- Understand the mind and body connection.
- Identify ways to maintain and enhance your emotional health.
- Understand mental health risks and warning signs.
- Outline steps you can take to ask for help.
- Describe actions you can take to improve your physical health.

As a first-year college student you will make many choices without parental oversight, including the way you take care of your body and mind. Some choices put you on a path to health, and other choices can lead you down a path toward illness. There is a strong connection between success in college and your ability to stay healthy.

Health is more than a strong body that doesn't get sick. Health also includes your overall sense of well-being (mental and emotional, for example) and healthy coping strategies to manage life stressors. Good health is about making positive choices in all of these areas and avoiding destructive choices. It's about learning to be smart, to set boundaries, to watch out for your safety, and to take care of the one body that will carry you through life. While health and wellness are often interchanged, it is important to differentiate the two concepts. Health is a state of physical, mental, and social well-being, while wellness is a process through which people become aware of and make choices toward a healthy and fulfilling life.

In this chapter you will learn the skills you need to live a healthy lifestyle for both your mind and body. The first step is to focus on who you are and how you can create your best self. This includes how to promote self-efficacy (i.e., your belief in yourself) and create strategies that you can use to improve your resiliency (i.e., your ability to recover from challenges and adapt to change) during your transition into college. Next we will discuss the mind and body connection and how we need to consider managing both as a top priority every day.

We will address identifying your feelings and mood and build a vocabulary that helps you communicate with others. Then we will move into the topic of stress versus anxiety and how to manage both. At this point, prepared with identifying and managing your emotions with strategies you can use on your own, we will

discuss when and how to seek help including the steps you must take to establish your own support system. Once you have a support system, we will then discuss the importance of managing your problems in a way that holds you accountable for your actions and behaviors yet provides a framework for others to help you effectively. We will then discuss the role of social media on your overall health and well-being and provide suggestions for creating boundaries with the use of social media. Lastly we will help you gain a better understanding of how to maintain physical health through good nutrition, maintaining physical activity, and sleep.

6.1 | Creating Your Best Self

Estimated Reading Time: 9 minutes.

Questions to Consider:

- What skills do you need to promote self-efficacy?
- What strategies can you use to improve your resiliency?

You are in college to fulfill an educational, personal, or professional goal. But it is just as important to work on creating your best self in the process, as *who* you are and *what* you believe you can achieve are just as important as the piece of paper you will receive at graduation. The first step in this process is identifying your positive attributes, which will be the foundation of your self-confidence. The belief in your abilities is also known as your *self-efficacy*. One way to increase your self-efficacy is to identify your strengths and values. Think of strengths as characteristics about ourselves that make us feel good about who we are, things we are good at, and parts of our personalities that make us good friends or good members of our community. Values are the things that matter to us the most. Typically we do the best we can to live by our values; however, sometimes we struggle. Identifying strengths and values is a great place to start when making big life transitions. Being clear on what you view as your strengths and the values that are important to you will help you with finding similar people to build your support network.

Let's get started. First, consider your strengths. In Table 6.1, we have listed several examples of strengths. What are your strengths? What would your family say if we asked them about your strengths? What about your friends or community, would they have other examples of your strengths? Answer these questions to make a list of your own.

Next, let's consider your values. When finding your support network, friends, new clubs or organizations to join, one way to start is to understand your values and then look for others that have similar values. Your values have been shaped largely by your family, friends and the culture you grew up in.

Many of these values may be challenged as you go through college and grow as an independent person. Understanding your current values and recognizing when they are being challenged may give you some insights into why you value what you do and what changes you may be open to. Consider the values in the table below and then list some of yours. Did you come to these through your family, your community?

Achievement	Efficiency	Hard Work	Positivity
Adventure	Empathy	Health	Security
Ambition	Equality	Honesty	Selflessness
Balance	Excellence	Honor	Service

Table 6.1

Belonging	Exploration	Humility	Simplicity
Calm	Fairness	Independence	Spontaneity
Challenge	Faith	Intelligence	Stability
Commitment	Family	Joy	Strength
Community	Fitness	Justice	Success
Competition	Flexibility	Love	Trustworthiness
Contribution	Freedom	Loyalty	Understanding
Control	Friends	Making a Difference	Uniqueness
Creativity	Fun	Merit	
Curiosity	Generosity	Openness	
Dependability	Growth	Originality	
Diversity	Happiness	Perfection	

Table 6.1

Throughout life, your values will often be challenged by other individuals. Someone may challenge your political views, or your religion, or your value in family. It is best to recognize your current values and then, as they are challenged, you can have a clearer understanding of the person you want to be.

ANALYSIS QUESTION

Take a few minutes to write down a list of your strengths and values. Once you have created a list, reflect on it and consider what changes you would like to make. Are there strengths that you do not currently have but want to work on over the next few years? Can you imagine how this list might continue to evolve during college and even after you've graduated?

Although your journey through college is just starting, you will soon have to make critical decisions as to what courses you want to take, potentially a major you want to focus on, and will be starting to look for your next step, life after college. One of the most asked questions you will face on this journey is where you see yourself in the next three to five years. Use this time to draft your vision.

6.2 | Your Overall Well-Being

Estimated completion time: 12 minutes.

Questions to Consider:

- How can I shift my mindset to change how I feel?
- How can I understand my emotions?

Day to day, you most likely experience situations that either align with your values or go against them; you may undergo experiences that make you confident or unconfident. These situations may trigger strong emotions or lead you to react in a manner that you may later regret. During transition periods, such as the transition into college, you may be even more likely to have these experiences, particularly involving topics and people you do not know well. When these situations happen, it is best to consider your thoughts, consult available resources, and allow time to understand how to best navigate your emotions.

Understanding Your Mindset

Let's first talk about your mindset. Have you ever heard someone refer to "seeing the glass half full" or "seeing the glass half empty?" This is another way of saying that, given a situation that could be interpreted multiple ways, some see the positives (half full) while others see the negatives (half empty). It is natural to move in and out of these frames of mind depending on the situation, your confidence level, the amount of stress you have in your life at the time, and so on. Setbacks and mistakes will always occur, and it's okay and appropriate to feel negatively about them. With experience and practice, you will learn how to move on from these negative feelings and adapt your attitudes in order to promote success.

Let's consider the following example:

Negative reaction: "I forgot to complete an assignment and now I will fail the course because this is the second time I missed submitting my work on time."

How does this feel? What emotions are you experiencing? What is your mood?

Now let's reframe to a more positive reaction: "Yes, I will get a zero for that assignment. However, if I work hard on the final two assignments and get at least a B on my final exam, I could improve my final grade to at least a C+."

How does this new thought feel in your body and mind? Is it different in a good way or not so good way? What emotions are you experiencing now? How has your mood changed?

Most likely you feel differently in your body and in your mind when you consider each of these responses. When the thinking is that the course is lost, you may feel disappointed, frustrated, and uncertain regarding the future. However, in the more positive reframing of the situation, the mood may shift to one of calmness and even purpose, because there is a way forward.

A key aspect of effective and positive attitudes is the awareness and ability to take responsibility for situations in which you contributed to the outcome. In the example above, the person did recognize that they were the ones who forgot to complete the assignment. Consider similar situations you've been in. Do you tend to put the responsibility for a missed assignment or a bad grade on yourself or your instructor? Do you tend to blame technology, unclear instructions, or too much work? While unfair situations can certainly occur, it is very important to recognize the role we play in them, and take ownership of mistakes and any extra work we need to undertake.

The ability to reconsider situations and find positive ways forward is a critical skill in navigating not only your college experience, but throughout your life, career, and relationships. To do that effectively, you will also need to identify your feelings and emotions. Examining what you are feeling will help you to more easily navigate those emotions. By understanding your emotions and how to communicate with others about how you are feeling, you will decrease the chances of behaviors that may have negative consequences.

Expanding your emotional vocabulary (see Figure 6.2) will allow you to be more specific in identifying the feelings you experience. Identifying your emotions will help you to find a solution or coping strategy more quickly. Using a tool such as this emotion wheel enables you to identify the emotion you may be experiencing.

You may think that you are "angry"; however, after you look at the emotion wheel you may realize you are hurt or disappointed. Also, by identifying your emotions at a given time, you will be able to improve your mood and the relationship between your feelings and mood. Once you have a better understanding of the relationships between your feelings and mood, you'll be better equipped to overcome situations in which you have low moods versus when your moods are more positive.

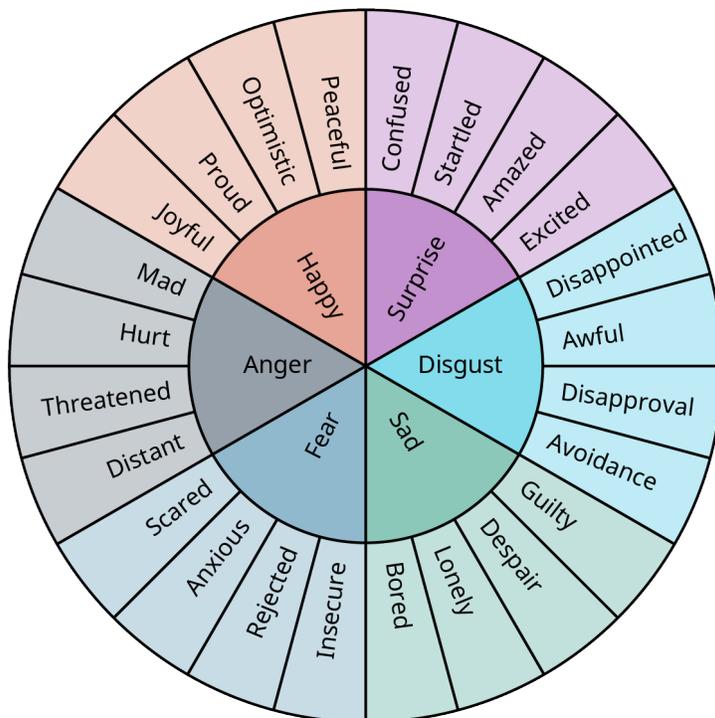**Figure 6.2** Tools like emotion wheels, based on Robert Plutchik's original, more complex work, can help us understand our feelings.

ACTIVITY

Take a moment to consider how your feelings change your mood by completing the sentences below with the first thing that comes to your mind.

I feel happy when...

I feel angry when...

I feel strong when...

I feel love when...

I feel proud when...

I feel jealous when...

6.3 | The Mind-Body Connection

Estimated completion time: 12 minutes.

Questions to Consider:

- Are there ways I can control how I react in stressful situations?
- Is it possible to "feel" stressed in your body?

Controlling Emotional Reactions

As you begin to understand how feelings impact your mood, and how your mood can feel in your body, you can start to align your emotions with the physical reactions that your body experiences. Doing this will help you in knowing when you need to use coping skills to help you through stronger emotions. (Coping skills are discussed in the section on mental health.)

Below is a conversation between a student and her professor.

Paige shows up to class a few minutes late, interrupting her professor when she enters the room. Professor Marsh is returning the most recent essay assignments. When Paige sees her grade she jumps up and explodes, "What is this garbage?!"

Surprised, Professor Marsh turns towards her. "I beg your pardon?"

"This grade," Paige says, walking towards her teacher. "What is this?" Paige leans against the desk. Palms of her hands sweating. Face flushed.

Standing this close, Professor Marsh can see the slight tremble in Paige's lip. "If you have a question about your paper, we can talk about it after class."

"I wanna know now. What is this total piece of garbage?" Paige waves her paper in the air.

"You're excused," the professor says, calmly and with no equivocation.

This gets Paige's attention and that of the other students in the room. "What?"

"You're excused," Professor Marsh juts her head towards the door. "Your behavior is completely inappropriate, so you need to leave."

"I don't want to leave."

"Fine. Then sit down and remain calm and respectful." And she does.

When class ends, Paige comes up to Professor Marsh, wrinkled paper in hand, and sets it down. "I don't understand why I got this grade."

"Well, let's go over my notes and see." Professor Marsh starts to read Paige's work, explaining her feedback.

Shaking her head, Paige pushes off from the edge of the desk, smacks it with her fist, and says, "That's B.S.!. This is totally personal and this class sucks!"

As the professor stands and gathers her things, Paige folds her arms across her chest. "Where are you going?"

"I'm leaving. If you aren't interested in talking about your work, I'm not interested in staying." And so Professor Marsh leaves – concerned about Paige's attitude, lack of boundaries, and well-being.

Have you experienced a situation when you've been so frustrated you wanted to scream? Would you have

responded differently? Do you feel Paige was in control of her emotions? In this example, Paige's reaction was driven by her emotions. Physically she experienced sweaty palms, a flushed face, and a trembling lip. Psychologically she was angry and hostile. Behaviorally, she was waving her paper in the air and yelling at the professor.

Examples of Types of Reactions			
Type of Reaction	Physical	Psychological	Behavioral
	sweating, shaking	feeling sad, hurt, angry	crying, punching, yelling

Paige's reaction illustrates the various reactions you may experience with emotions including the physical, psychological, and behavioral reactions. When experiencing these reactions it is best to take a step back and not allow your emotions to take over. This situation could have been avoided if Paige took a moment to pause and collect her thoughts. Reacting quickly often results in over-reacting; so, to prevent negative consequences, a better approach is to take a breath and walk away. The same idea applies when you are not in person: Taking substantial time before sending an email or text, reacting to a social media post, or responding to a comment in a discussion forum can make a difference between a careful, constructive outcome and one that leads to even deeper problems.

As you continue this journey of managing your emotions you will find that you experience more situations in which you feel in control of your emotions and less often experience emotion-driven behaviors and lack of control.

Physical Responses and Well-Being

When you have felt really frustrated with a personal relationship or an upcoming test, have you ever experienced a headache, stomachache or perhaps felt extremely tired? This is your brain and body working together to let you know that they are stressed. The connection between our mind and body is powerful, and both feed off of each other to influence how we feel and function every day. The amount of sleep we get, the types of food we eat, what we do for exercise or what we don't do, all interrelate and lead to how we can manage our emotions or not.

Developing coping skills will help you manage how you are feeling and calm your body and mind with the goal of decreasing your stress level. Taking a pause versus reacting immediately, such as going on a walk, connecting with a friend, or simply focusing on your breath during times of stress has the potential to slow down your heart rate and calm your mind.

Although coping strategies help in these stressful situations, what you do every day to prepare your body to manage these times matters just as much. You need to focus on taking care of your body and mind daily. Again, the mind-body connection is so strong that what you eat, how much activity you do, and the amount of time you sleep directly influences your ability to manage your day to day stressors.

Below are some simple suggestions to ensure you are making your mind and body your top priority. A more comprehensive understanding of each of these behaviors is discussed later in the chapter.

- A healthy diet will help you to be your best self and keep your mind and body functioning properly. Balance is critical: Try to have a serving of a protein source, a carbohydrate source, and a serving of a fruit and vegetable at each meal. Typically you will find that your body and mind need fuel every 3-4 hours during the day. Knowing this, you can plan accordingly your meals and snacks. Lastly, don't forget to hydrate.
- Being active for at least 60 minutes every day can be a goal for you if you find yourself spending most of your day sitting–in class, while studying, or as you complete assignments. Being physically active will help

your body feel awake and make you stronger to handle stressful situations. Even simple activities such as taking a walk, finding a yoga class or online video, or even a pick-up game of basketball can maintain good physical health.

- As important as being active is, it is equally critical to spend time sleeping. Note, that being inactive (watching TV, playing video games) is not the same to our bodies as restorative sleep. Maintaining a regular sleep routine and schedule is critical to your mind and body.

APPLICATION ✓

Choose one health goal from each of the three areas described above and write down how you will ensure that you meet each goal by listing your tactics, or what you will do regularly to meet the goal.

	Goal	Tactics
Example: Being active	To walk at least 2 miles each day	1) Block off 30 minutes after the last class of the day to walk the nature trail on campus 2) Use my watch to track my steps each day to ensure I have walked at least 2 miles
Eating healthfully		
Being active		
Sleeping fully		

6.4 | Mental Health Basics

Estimated completion time: 25 minutes.

Question to consider:

- What are some of the ways to tell if you are holding onto stress?
- How do mindfulness and gratitude encourage emotional health?

What Is Mental Health?

Mental health "includes emotional, psychological, and social well-being. It affects how we think, feel, act, make choices, and relate to others. Mental health is more than the absence of a mental illness—it's essential to your overall health and quality of life."[1] According to the National Alliance on Mental Illness (NAMI), a mental illness is a condition that affects a person's thinking, feeling, or mood. The condition may affect a person's ability to relate to others and function throughout the day. A recent survey of over 350,000 college students from almost 400 campuses across the U.S. found that more than 60% of students met criteria for one or more mental health illness diagnosis (i.e., depression, anxiety, eating disorder, suicide ideation).[2] Although mental health illness worsened among all students, health disparities were found among racially and ethnically minorized (i.e., Asian, Black, Latinx, American Indian/Alaskan Native, Arab American) students.

A mental health condition isn't the result of one event; it is most often the result of multiple overlapping causes. Environment, lifestyle, and genetic predisposition can all be factors in whether someone develops a mental health condition. Traumatic life events or stressful experiences may make some people more susceptible, and brain biochemistry may play a role as well. Exposure to harmful social media also plays a role and impacts your anxiety levels, self-perception, and other aspects of mental health. Mental health conditions show up in many ways. Anxiety, depression, and eating disorders are some of the most common.

Depression

Most people feel sad at times. This is a normal reaction to loss or struggles we face. Being sad is not the same as having depression. When intense sadness lasts for several days or even weeks, and you are no longer interested in activities you once enjoyed, it may be depression. Depression can lead to a variety of emotional and physical problems and can decrease a person's ability to function at work and at home.

Depression occurs when something in our brain stops functioning correctly. This dysfunction prevents you from taking care of yourself, interferes with your relationships, and may lead to you missing school or work. Depression does not have a single cause. It can follow a life crisis or physical illness, but it can also occur spontaneously. Several factors including trauma, a significant life change, brain injury, and drug and alcohol misuse may contribute to depression. Regardless of how or why it occurs, depression is a treatable medical condition, and the ability to identify what it is and how to treat it is important.

Because depression is a medical illness, it needs to be treated by a health professional. If you are experiencing symptoms of depression, reach out to your doctor or call your local mental health resources on campus. During this situation, having a friend or family member to call and talk to is the fastest way to get the help you need. Building a network of support for yourself is critical.

Suicidal Behavior

Suicide is when people direct violence at themselves with the intent to end their lives, and they die because of their actions.[3] People who contemplate suicide often experience a deep feeling of hopelessness. They often feel they can't cope with challenging life events and are not able to see solutions to problems. At the moment, they are unable to see that the challenges are really only temporary. Most survivors of suicide attempts go on to live wonderful, full lives.

Help is available all day, every day, for anyone who might be in crisis. By offering immediate counseling to everyone that may need it, crisis centers provide invaluable support at the most critical times. If you or someone you know has warning signs of suicide, get help as soon as possible. Family and friends are often the first to recognize any warning signs and can help you to take the first step in finding treatment.

If someone is telling you that they are going to kill themselves, do not leave them alone, and call the suicide hotline at 988. The National Suicide Prevention Lifeline at 1-800-273-TALK (8255) is available 24 hours a day, 7 days a week. A Crisis Text Line is also available 24/7 by texting HOME to 741741, 85258, or 686868.

Depression is a key risk factor for suicide, along with substance abuse, chronic debilitating pain, mental health disorders, and a family history of suicide.

These are some of the warning signs to help you determine if a friend or loved one is at risk for suicide, especially if the behavior is new, has increased, or seems related to a painful event:

- talking about wanting to die or to kill themselves
- looking for a way to kill themselves, like searching online or buying a gun
- talking about feeling hopeless or having no reason to live

1   National Institute of Mental Health. "Caring for your mental health." https://www.nimh.nih.gov/health/topics/caring-for-your-mental-health
2   Lipson SK J of Affective Disorders 2022 v306 page138-147
3   National Institute of Mental Health, "Frequently asked questions about suicide." https://www.nimh.nih.gov/health/publications/suicide-faq/index.shtml

- talking about feeling trapped or in unbearable pain
- talking about being a burden to others
- increasing the use of alcohol or drugs
- acting anxious or agitated; behaving recklessly
- sleeping too little or too much
- withdrawing or isolating themselves
- showing rage or talking about seeking revenge
- extreme mood swings[4]

Eating Disorders

Eating disorders are not uncommon among students. Stress or anxiety may create a desire for some students to overeat, while others may develop a concern about body shape or weight and significantly reduce their food intake. The table below provides three common eating disorders.

Eating Disorder Type	Description
Anorexia nervosa (also called "anorexia")	Is a potentially fatal illness marked by self-starvation. People with anorexia usually have an irrational concern about body shape or weight and eat a very restricted diet. They may also feel the need to exercise all the time, even when they are sick or exhausted.
Binge eating	Is frequent consumption of large amounts of food in a short period of time. People who binge regularly (more than once a week) and feel a lack of control over their eating may have binge eating disorder (BED).
Bulimia	Is characterized by cycles of excessive eating followed by eliminating food through vomiting or with laxatives

Eating disorders can lead to many complications, some of them very serious, like heart conditions and kidney failure. It is crucial for anyone with an eating disorder to stabilize their health, then continue medical care and counseling to reach full recovery. Eating disorders can be treated successfully with medical care, psychotherapy, counseling, or coaching. It is important to seek treatment if you suspect there is an issue. Treatment can address any underlying psychological issues. If you think you might have an eating disorder, visit a doctor or your campus health center. The National Eating Disorders Association (https://openstax.org/l/ eating-disorders) also offers information, help, and support.

Anxiety Disorders

Anxiety disorders are the most common mental health concern in the United States, and while there are many types of anxiety disorders, they all have one thing in common: "persistent, excessive fear or worry in situations that are not threatening."[5] Physically, your heart may race, and you may experience shortness of breath, nausea, or intense fatigue. Talk with a mental health care professional if you experience a level of anxiety that keeps you from your regular daily activities.

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4   U.S. Substance Abuse and Mental Health Services Administration. "We can all prevent suicide."
https://suicidepreventionlifeline.org/how-we-can-all-prevent-suicide/
5   National Institute of Mental Health. "Anxiety Disorders.", https://www.nami.org/NAMI/media/NAMI-Media/Images/FactSheets/
Anxiety-Disorders-FS.pdf

Identifying Anxiety

Experiencing stress is both normal and healthy to build both your self-efficacy and resilience. We typically experience different types of stressors throughout the day. Although stress doesn't always feel good for us to experience and is often unpleasant when it is happening, it is typically for a short amount of time. Think about the last time you were stressed: taking an important final exam, having to present your work in front of classmates, introducing yourself to others at a new club you joined. These situations are typically very short and centered around a particular event. You may experience sweaty palms, a fast heartbeat, a headache or stomachache, but these feelings usually go away after the situation. To learn more about what stress does to your body, visit the American Psychological Association's page on stress (https://openstax.org/l/apa-stress).

Stress	Anxiety
Normal, healthy response	Unhealthy response
Acute	Chronic
Centered around a particular event	Happens for all kinds of events
Feelings usually go away after the event	Feelings don't go away

On the other hand, when you are experiencing anxiety, your body and mind are trying to communicate to you that you need to seek help and may need medical treatment. Anxiety will feel similar to a stressful situation, as described above, but the feeling doesn't go away. Using an example from above, you have to present your work in front of your classmates today and you feel very nauseous, your heart is pounding so hard in your chest you feel dizzy and have to sit down. You don't think you can walk the 10 minutes to class and decide to just skip class and stay home. This may be anxiety. Anxiety is different than stress as it sometimes prevents you from doing your daily activities. Anxiety may affect your ability to concentrate, increase your risk for heart disease, can weaken your immune system, disrupt your sleep, and can cause fatigue, and depression.[6] The table above contrasts the differences between stress and anxiety so that you can better determine what you are experiencing over time. When you feel any of the symptoms listed above, ask yourself "Is this stress or anxiety?"

Additional Resources

Because entering college is such a big transition, it is important to know what health services are available on your campus. Some help may be beyond the scope of a college counseling program, and if this is the case, your college health center can refer you to off-campus resources to support you.

Regardless of where you attend college, OK2TALK and NAMI offer online, text, and phone support.

- OK2TALK (https://openstax.org/l/talkorg) is a community for young adults struggling with mental health problems. It offers a safe place to talk.
- Call the NAMI helpline at 800-950-6264, or txt NAMI to 741741.

Your brain requires a constant supply of energy to function. What you eat and are exposed to have a direct impact on its processes, your mood, and your ability to make good decisions. A majority of college students feel anxious, lonely, or depressed at some point during the year. We all have bad days, and sometimes bad days string into weeks. It's okay to feel bad. What's important is to acknowledge and work through your feelings, and find a friend or a counselor to talk to.

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6 The University of Maryland Medical Center UMMC, https://www.umms.org/ummc

Developing Coping Strategies

Everyone experiences stress during their lives. It is part of the human experience, and despite how healthy and well-adjusted you are, stress is inevitable. What makes a difference is how you deal with it. One of the most important things you can do is to keep perspective on your stressors. When feeling stressed, ask yourself, on a scale of 1 to 100, how stressful a situation is this? Will I even remember this three years from now? When facing potential stressors, the way you interpret what you're experiencing can intensify your stress or minimize it.

There are many ways to manage stress. Take a look at some of the suggestions below that can be added to your own "toolkit" for coping with stress. As you read through the descriptions, think about the following questions:

- Which ones have you tried? You may already have one or more that work really well for you.
- Which ones do you want to try? If you have not tried any or many, consider focusing on adding one to your strategies for coping with stress.
- Which ones would be best in certain situations? It's helpful to have different tools for different situations—for example, a calming yoga pose in your dorm room and deep breathing in the classroom.

Mindfulness

Mindfulness means being present with your thoughts, feelings, bodily sensations, and surrounding environment. Mindfulness is also without judgment—meaning there is no right or wrong way to think or feel in a given moment. When we practice mindfulness, our thoughts tune into what we're sensing in the present moment rather than rehashing the past or imagining the future.[7]

Anything that keeps you present in the moment and gives your prefrontal cortex (the reasoning and thinking part of your brain) a break is practicing mindfulness. Mindfulness can be a slow walk; looking intently at the grass, trees, flowers, or buildings; and being aware of what you are sensing and feeling. Mindfulness can be sitting quietly—even sitting still in a quiet place for as little as a few minutes can reduce heart rate and blood pressure.

Developing a practice of mindfulness is easier than you may think:

- **Slow down.** From brushing your teeth, to washing your face, to shampooing your hair—can you take the speed out of getting ready in the morning? Focus on the activity, pay attention to what you are doing, stay present (this means don't think about what happened last night or what's in store for the day, just stay focused on the activity), and take your time.
- **Focus on your breath.** How fast are you breathing? Is your breath coming from your chest or your belly? Can you feel the air come through your nose on the inhale? Can you slow down the exhale? Can you feel your body relax when you slow the exhale?
- **Connect to your environment.** Walk for a few minutes, focused on the world around you—look at the leaves on the trees or the light at the corner, listen to the sounds around you, stay with your surroundings, and observe what you see and hear around you.

  "We can't change the world, at least not quickly, but we can change our brains. By practicing mindfulness all of us have the capacity to develop a deeper sense of calm."

  — Rick Hanson, author, *Resilient*

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7   Moran, Joan; University of California at Los Angeles. "Pause, reflect and give thanks." http://newsroom.ucla.edu/stories/gratitude-249167

Deep Breathing

When people hear mindfulness they often think of meditation. While meditation is one method of mindfulness, there are many others that may be simpler and easier for you to practice. Deep breathing helps lower stress and reduce anxiety, and it is simple yet very powerful. A daily mindful breathing practice has been shown to reduce test anxiety in college students.[8] A 2-4-6-8 breathing pattern is a very useful tool that can be used to help bring a sense of calm and to help mild to moderate anxiety. It takes almost no time, requires no equipment, and can be done anywhere:

- Start by quickly exhaling any air in your lungs (to the count of 2).
- Breathing in through your nose, inhale to the count of 4.
- Hold your breath for a count of 6.
- Slowly exhale through your mouth to the count of 8.

This is one round. Do not repeat the quick exhale again. Instead start round two with an inhale through your nose to the count of 4, hold for 6, and exhale to 8. Repeat for three more rounds to relax your body and mind.

With practice, 2-4-6-8 breathing will become a useful tool for times when you experience tension or stress.

Meditation

Dan Harris, a news reporter at ABC, suffered a major panic attack on national television. Following this challenging period in his life, he learned to meditate and found that it made him calmer and more resilient. He's now on a mission to make meditation approachable to everyone. Dan used to be a skeptic about meditation but now says that if he learned to meditate, anyone can learn to meditate! Dan reminds us that we are going to get lost, and our mind is going to stray, and that's okay. Simply notice when you're lost and start over. Every time your mind strays and you start over, it is like a bicep curl for your brain. Start with 3 minutes of meditation, and slowly work your way up to 15 or 20. To hear more about Dan's journey, watch this video (https://openstax.org/l/danharris), and for a simple meditation to get started, you can try one of the videos on the meditation Youtube channel (https://openstax.org/l/meditation). There are also some great meditation apps including Insight Timer, CALM, and Headspace.

Gratitude

Too often people think it is the external factors that bring us joy and happiness, when really it's all related to internal work. According to UCLA's Mindfulness Awareness Research Center, "Having an attitude of gratitude changes the molecular structure of the brain, and makes us healthier and happier. When you feel happiness, the central nervous system is affected. You are more peaceful, less reactive and less resistant."[9]

Numerous studies show that people who count their blessings tend to be happier and less depressed. In a UC Berkeley study, researchers recruited 300 people who were experiencing emotional or mental health challenges and randomly divided them into three groups. All three groups received counseling services. The first group also wrote a letter of gratitude every week for three weeks. The second group wrote about their thoughts and feelings with negative experiences. The third group received only counseling. The people in the group who wrote gratitude letters reported significantly better mental health for up to 12 weeks after the writing exercise ended.

8 Levitin, Time Special Edition 2018, The New Mindfulness
9 2016 Study Journal of PLoS One, https://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1000316

This would suggest that a healthy emotional self-care practice is to take note of good experiences or when you see something that makes you smile. Think about why the experience feels so good. According to Rick Hanson, author of *Resilient*, "Each day is strewn with little jewels. The idea is to see them and pick them up. When you notice something positive, stay with the feeling for 30 seconds. Feel the emotions in your whole body. Maybe your heart feels lighter or you're smiling. The more you can deepen and lengthen positive experiences the longer those positivity neurons in your brain are firing—and the longer they fire the stronger the underlying neural networks become. Repeat that process a half dozen times a day and you'll feel stronger, more stable and calmer within a few weeks."[10]

Build a Coping Toolkit

Practice self-compassion ☐	Laugh with friends ☐
Eat clean food ☐	Listen to music ☐

Practice Mindfulness ☐
    Meditation
    Deep breathing (2-4-6-8)
    A walk in nature
	Drink calming tea ☐

	Watch a funny movie ☐
	Write in a gratitude journal ☐

Exercise Daily ☐
    Yoga, Tai chi
    Dance
    Sports
    Run, Spin, Lift
	Change phone screen to this picture ☐

	Change passwords to calming words ☐
Take epsom salt baths ☐	Keep something in your backpack ☐ that reminds you to take a deep breath every time you see it
Give and receive hugs ☐	

Figure 6.3 Do you have a toolkit filled with a variety of coping tools to help you navigate any stressful situation? (Credit: Modification of work by Robin Benzrihem)

ACTIVITY

Take a look at some of the suggested tools for your coping toolkit. Which ones have you tried? Have they been effective in helping you manage stress? Ask two friends or family members about their favorite stress-management strategies. What has worked for you and others that is not on this list? Identify two new tools you would like to explore and articulate how you will determine if they work for you, and then you can confidently add them to your toolkit.

Asking for Help

If you find that you are stuck in a low mood and are more often feeling down, hopeless, a burden to others and simply don't find many things bring you joy, you may need help from a professional. As just discussed, there may be situations when you may want advice or support and need to reach out to others. Having your own support system is key. In this section you will build the foundation of your support system.

Before you began college you may have had a teacher, guidance counselor, a friend's big brother/sister, or your own sibling, that helped you through difficult situations. Perhaps these individuals are still in your life but are harder to reach. This is your time to consider who you know now and then start the process of building a bigger system.

10   Hanson, R. (2020). Resilient. Harmony

ACTIVITY

Take a moment now to list the names of a few people who are part of your support system. Do you have their phone number or email? Do you know where they live? Perhaps you have a new partner in one of your classes and you have a project you are working on together. This is a great start. Create a list of offices, locations, and contact information now so that when you need these resources you can quickly find the number to call. Learn about your campus mental health resources. You can even create a contact in your phone "student mental health services" so that it is ready when you need it.

People	Contact Number	Best Type of Support
Jane Doe	xxx-xxx-xxxx	Setting boundaries with family

List of Resources

Reaching out and making a few good friends in this new environment will be a great start in this process. This may be easier said than done; however, it is a great skill to develop while in college as you are around so many people. You will also share at least one or two values or strengths with these individuals at your school which is a great conversation starter. Other people that may be in your support system could be family members, professors or counselors at school, or even a sports coach or leader of a community group you participate in.

Examples of situations in which you may need to ask for help are endless. You may have low motivation to complete assignments or attend class, be unable to concentrate during lectures, feel helpless with simple tasks, miss family or friends, or just feel unhappy with being in college. All of these situations could be related to a lack of sleep, poor eating habits, the negative effects of sustained stress, or symptoms of depression you may be experiencing. If you find that you are failing class or are in danger of being dropped because of attendance issues, or just can't seem to be motivated to leave your dorm room, use your support system. Figure 6.4 provides a flowchart for dealing with common situations you may experience in college by providing prompts for determining when you can make changes on your own and when you may need to seek help.
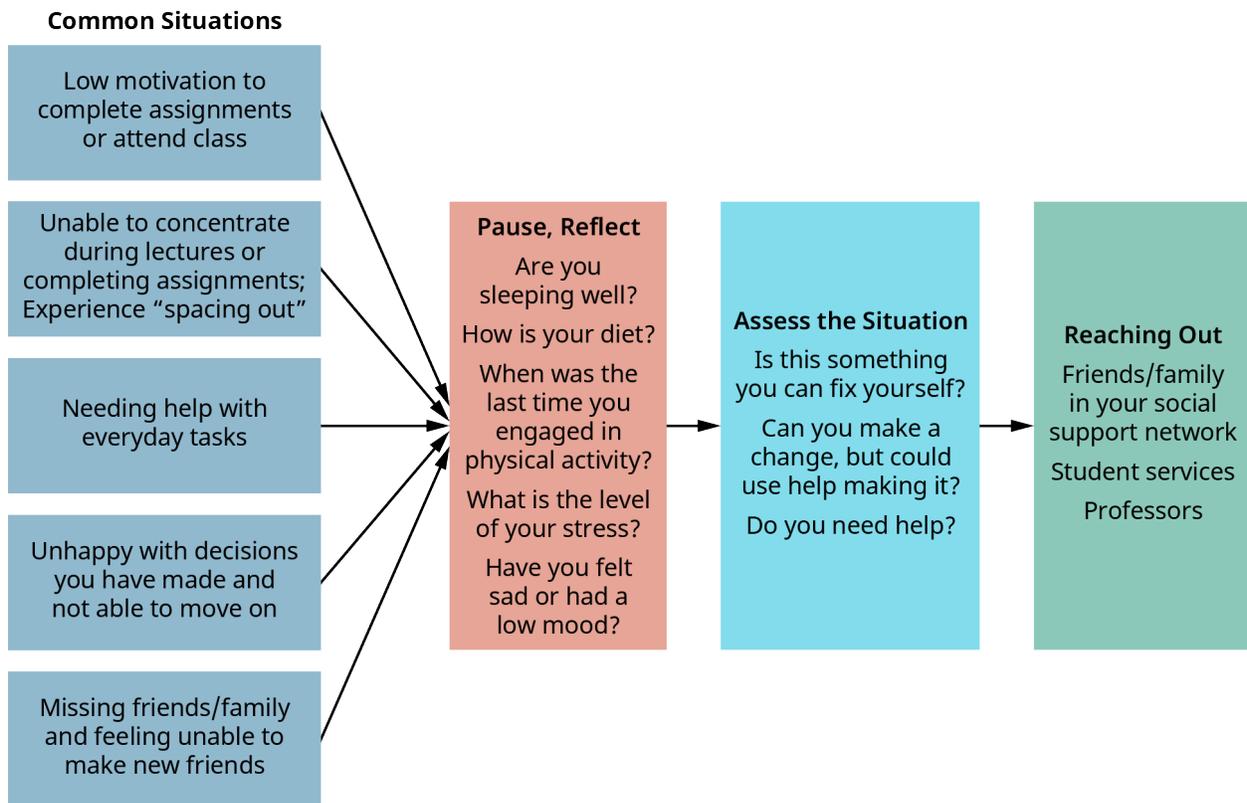
Common Situations

Figure 6.4 Common Situations and Next Steps

If you found yourself in one of these situations and needed support today, who would you call and why? If they weren't available, who is the next person on your list? Having a plan and a group of people you can reach out to is a game changer for when you are stuck in a situation and need help in moving forward.

Sometimes, seeking help and starting the conversation with someone can feel intimidating and even stressful. Consider these examples to help you begin:

- "I feel very alone today. Can we talk?"
- "I think I am going to fail my class. I could really use some help coming up with a plan."
- "I said some things that I shouldn't have to my close friend and don't know what to do about it. What would you do if you were me?"
- "You are so good at working in groups and I just hate it. It makes me feel so uncomfortable. Could you tell me how you do it?"
- "I have to get up in front of my class to present on a research topic and I am very nervous. What can I do to feel less stressed about this?"

Having a list of a few people that you can call or stop to chat with will make these situations easier to manage and help you in feeling like you are not in it alone. When you do reach out, consider how you feel, what your mood is like, if you have a handle on your emotions. You should be able to express yourself in the situation but have space to receive help. Remember it is best to go for a walk to cool off or take a few moments by pausing to gather your thoughts. This is a great time to pull in your support system to help you work through these feelings and emotions. With your support system you will be able to have a clearer picture of the problem and discover some steps to take to overcome the situation.

The Role of Social Media on Mental Health

Estimated Completion Time: 30 minutes.

Questions to Consider:

- Why do I use social media?
- How can I balance positive and negative social media use?
- How can I identify and improve problematic social media use?
- What should I do if I experience cyberbullying?

Some people refer to the time we are living in as the age of overload. It's easy to get worn down by social media and the constant news cycle, and to be overwhelmed by too many choices that social media affords us. We live in a fast-paced, always-on world with a lot of pressures.

Social media offers many benefits, from staying connected to your loved ones and friends, learning about events in your community, and providing you with the ability to get information quickly. Unfortunately, these benefits are compounded with many risks (see Figure 6.5).[11] Among college students, social media has also been associated with negative effects on self-esteem and self-image. Overuse of social media has been found to increase symptoms of anxiety, loneliness, and depression.

Pros	Balance	Cons
Connect with people		Lack in-person social skills
Up to date with news & issues		Fake news & too much info
Increased confidence & self-esteem		Decreased confidence & self-esteem
Create your own narrative		Lives appear "perfect"
Entertainment anytime		Increased procrastination
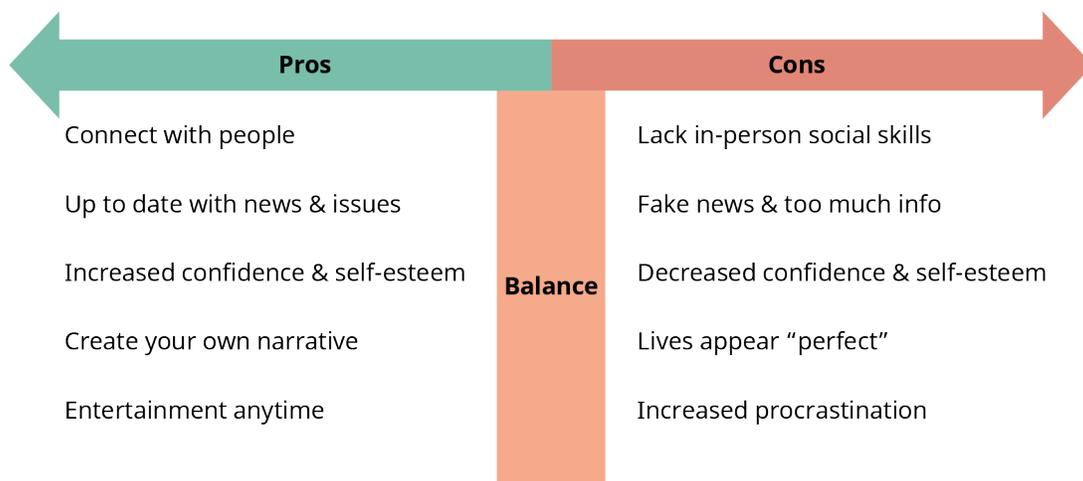
Figure 6.5 The Pros and Cons of Social Media

Uncovering Your Relationship with Social Media

By better understanding your relationship with social media, you will be more successful in finding the right balance and occasions for using it. The best way to get started is to just become aware of your relationship with social media and how it may or may not impact your own mental health.

ANALYSIS QUESTION

What is your relationship with social media? Do you feel you may have a problematic relationship with social media use? Here are some Questions to Consider and learn more regarding your relationship with social media use:

- Do you spend a lot of time planning or thinking about how to use social media?

11   Haddad JM Curr Psychiatry Rep. 2021; 23(11): 70.

- Do you have difficulty concentrating in class or when you are studying due to social media use?
- Do you often use social media as an escape from what is happening in the real world?
- Do you feel you have to spend time on social media to feel satisfaction or pleasure?
- Do you find yourself engaging in or wanting to engage in social media when it is not appropriate (e.g., during a class)?
- Do you feel that you are more irritable, anxious, or sad when you are not able to use social media?
- Do you have experience with attempting to control your social media use and not being successful in such efforts?

Upon reflection from the activity above, where is your relationship with social media? To consider the relationship another way, think about the questions in the table below? Which more accurately describes your most frequent feelings when using social media?

Frequency and Duration	Do you use social media for occasional entertainment and connection?	Or do you perhaps feel that you need constant stimulation and validation from your online network?
Feelings and Impact	Do you find yourself truly happy after looking through friends' posts or seeing your feed?	Or have you noticed that your mood is negatively impacted by what you are seeing on social media?
Outcomes and desire for change	Do you take inspiration and ideas from social media?	Or do you frequently feel you are "less than," or feel pressure to change?

Impact on Your Focus and Attention

When asked how social media use impacts a student's ability to study, two out of three undergraduate college students indicated they were more drawn to social media than their school work.[12] Although the answer may be as simple as social media is more fun, the deeper issue may be related to how your use of social media has trained your brain to prefer to take in information in short doses. Social media rewards a distracted, shorter attention span, which may reward giving our brain quick doses of dopamine. (Dopamine is a chemical in your brain related to feelings of pleasure or satisfaction.) Similarly, when your phone beeps, buzzes, or vibrates with new posts waiting for you, your brain receives a dose of dopamine.

Distractions from social media have also been linked to our desire to be connected and be available for people in our networks.[13] Similar studies have shown that the fear of missing out (FoMO) leads to significant social media-driven distractions.

The first step of gaining control over these distractions is by eliminating them. As you know, you can easily turn on/off your phone (watch, computer, etc.) notifications. Consider switching away from social media during your relaxing time and pick up a book or magazine, an old school puzzle, or journaling on paper. Another way to improve your concentration is to focus on one task at a time. Put away your phone for 30-90 minutes, jot down three tasks you need to complete, and check one off at a time. The more you use these strategies, the faster you will regain your focus and attention.

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12   Kolhar M Saudi Journal of Biological Sciences 2021; 28(4):2216
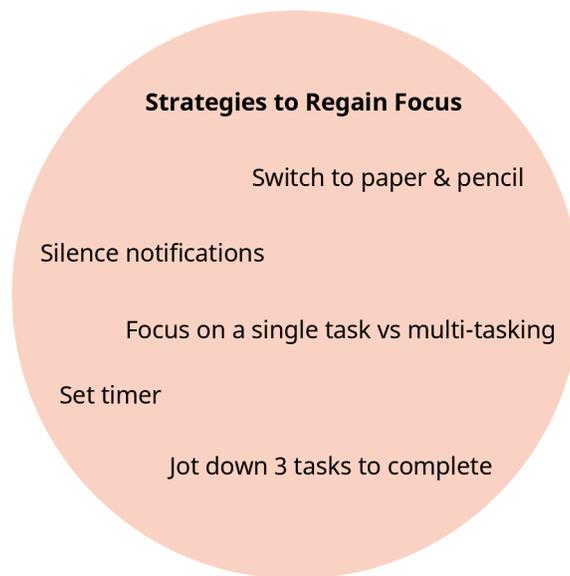13   Koessmeier C Frontiers in Psychology 2021. "Why are we distracted by social media?" https://www.frontiersin.org/articles/10.3389/fpsyg.2021.711416/full

Figure 6.6 Strategies to Regain Focus

Impact on Relationships

Problematic social media use has been well documented among individuals who experience social anxiety and loneliness.[14] For these individuals, social media is often used as a form of connection when in-person relationships are lacking. As mentioned above, for individuals who actively use social media as a way to directly communicate with others, social media use can provide social support and connection. Alternatively, those who use social media more passively, such as only to view other's lives, have more negative outcomes that can include depression and anxiety. Are you active in your engagement or passive?

If you feel your engagement is only passive, consider this as a red flag, and start by setting boundaries on your social media use as discussed above. To prevent social media from impacting your relationships, consider using social media more actively by reaching out to those in your network to plan in-person meet ups. Also, if you find yourself frequently comparing yourself to what you see on others' social media, remember that people's digital life might not be reflective of reality. If you find such comparisons damaging your self-esteem and relationship with yourself, reach out to your support network and open the conversation.

Need for Validation

Consider this scenario: Josh just finished finals week and posted on social media, "I guess I will start packing up my room. I know I just failed my chemistry final. My parents are going to threaten not to pay for next semester." An hour later, Josh is back in his dorm room and checks his account. No comments. No likes. No "hug" or "care" emoji.

How did you feel when you read this situation? Did it trigger you to cringe and feel bad for Josh? Have you ever found yourself in a similar situation? How did you feel then?

When you first started using social media you may have simply posted a picture or update in order to keep your friends and family connected with your life. At some point in time, you likely started to expect likes and comments. Eventually, if you don't get the same level of likes and comments you have become accustomed to, you may start to think your connections are not interested in you.

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14   O'Day EB Computers in Human Behavior Reports 2021

According to research, the lack of response is often interpreted as "no one cares since no one took the time to respond." This line of thinking can lead to self-doubt, insecurity, and anxiety.[15] Seeking validation – either positive or negative -- via social media is moving your relationship with social media into problem territory. If you reach that point, you should pause and reflect on the meaning of this behavior. One of the immediate steps you can take to disrupt this unhealthy cycle is to pause before you post.

Before posting ask yourself these questions...

1) Why am I posting?

2) Am I seeking approval or reassurance?

3) How will I feel if no one comments or likes this post?

Figure 6.7

Problematic Social Media Use

In 2021, the average internet user spent nearly two and a half hours per day on social media.[16] That translates to over 37 days per year, and over the average lifetime, more than seven years of time. Let that sink in. Since we spend so much time on social media, dedicating such a massive portion of our lives to it, it's even more important we spend that time well. As stated above, there are definitely positives associated with engaging in social media, especially if you use it to learn more, broaden your social network, and enhance your life by letting it lead you to new offline experiences. However, there are times when social media use, or overuse, can be problematic and unhealthy.

Factors that lead to an individual having problematic social media use include the following:

1. poor self-regulation,
2. lack of control of time spent on social media,
3. social media as a mood regulator,
4. history of obsessive thinking,
5. social media impacting your social and/or professional life, and
6. if social media use is altered to negate these negative factors yet the individual relapses.[17]

As a student, problematic social media use could mean that your attendance in class declines or you fail to complete assignments, which leads to lower academic achievement. You may find watching videos and viewing posts more satisfying than learning. You may regularly become distracted while participating in activities that require your full attention, such as driving.[18] Further, problematic social media use refers to using social media platforms for reasons that are illegal, unethical, or socially unacceptable behaviors such as stalking, bullying, or spreading misinformation.

15   McLean Hospital. "The social dilemma: Social media and your mental health." https://www.mcleanhospital.org/essential/it-or-not-social-medias-affecting-your-mental-health

16   Kemp S. "Reels Grew by 220M and other mindblowing stats." Hootsuite blog, 2022. https://blog.hootsuite.com/simon-kemp-social-media/

17   Stanculescu E. Telematics and Informatics. 2022. "Social media addiction profiles and their antecedents." https://dl.acm.org/doi/abs/10.1016/j.tele.2022.101879

18   Sun Y. Addictive Behaviors. 2021. "A review of theories and models applied in studies of social media addiction and implications for future research"

As previously described, evaluating your relationship with social media is the first place to start. In a recent intervention to decrease problematic social media use, students were asked to log their daily use of social media for one week.[19] They logged the length of their time on social media, as well as how they were using it and their thoughts and emotions. After one week, students significantly reduced their level of problematic social media use and improved their mental health and academic efficiency.

Cyberbullying

The relationship between mental health issues and bullying is well documented. The relationship between mental health and bullying in the digital space, known as cyberbullying, is a newer problem and unfortunately provides a platform for bullies to say things behind the screen that most likely would never be said in person. Compared to traditional bullying, cyberbullying isn't easily reduced by supervision, has the potential for larger audiences, is often anonymous, and has fewer opportunities for someone to provide direct feedback in order to put a stop to the activity.[20]

For individuals experiencing cyberbullying, it is much harder to avoid attacks and/or escape as the bullying can take place any time of the day. Cyberbullying has a larger audience due to how well connected social media is throughout the community, state, country, and world. Posts and conversations on social media have limitless reach which often puts the victim in a situation with very little control. Once information is in the virtual world, the text becomes very hard to remove and can "go viral" where it becomes so popular you can find it on any search platform.

Cyberbullying via social media can affect people of all ages, and it puts individuals in a difficult situation in which they cannot adequately defend themselves. The roles of each person involved in cyberbullying is consistently in a state of transition as people switch roles from being the victim, to the perpetrator, or the bystander as social media features (i.e., like, share) are utilized. In a recent study of US college students, 1 out of 2 students report being a victim of cyberbullying, while 1 out of 4 students report being a perpetrator at least one time per month.[21]

Prevention strategies to decrease frequency of cyberbullying events are limited; however, research addressing victimization has noted the most effective strategy is to engage your social support network. Together you and a supportive person in your life can discuss the situation and make a plan to avoid further cyberbullying. Eliminating your social media platform where the attacks are occurring is not the only solution. Social media companies are aware that their users may experience these negative events and have put systems into place to report when users engage in such attacks. Theresa companies have also enabled features to block or modify account privacy to prevent situations in the future. The table below provides common examples of cyberbullying and their explanations.

Forms of Cyberbullying	Explanation
Victimization	person who receives the harmful communication
Perpetration	person initiating the harmful communication
Bystander or witness	person who witnesses the harmful communication

19   Hou Y. Journal of Psychosocial Research on Cyberspace. 2019. "Social media addiction: its impact, mediation, and intervention."
20   Sticca F. Journal of Youth and Adolescence. 2013. "Longitudinal risk factors for cyberbullying in adolescence."
21   Giumetti GW. Aggressive Behavior 2022;48:40. "Predictors and outcomes of cyberbullying among college students: A two-wave study." https://onlinelibrary.wiley.com/doi/abs/10.1002/ab.21992

If you feel you or someone you know is a victim, a perpetrator, or that you are a witness to cyberbullying you can contact student services and they can help safely guide you to the correct resources on your campus. If you need immediate assistance, IT departments and campus security can help you as well as recommend local law enforcement if illegal activity is at play including but not limited to harassment and stalking. Keep a record of the details including dates and times and take pictures when possible.

For more information on cyberbullying consult these resources.

Resource	Details
stopbullying.gov	This is a federal government website and is managed by the U.S. Department of Health and Human Services. It provides trusted resources for prevention and reporting of cyberbullying as well as documents strategies to deal with "haters."
cyberbullying.org	This website provides a list of social media apps, gaming networks, and other platforms and a link to how to report cyberbullying for this particular website.
jedfoundation.org	The Jed Foundation is a nonprofit focused on youth mental health and suicide prevention. Through this website you can find immediate resources for you ("I need help") or for someone you want to help ("I want to help"). The website also has a resource page with more information on cyberbullying including how to cope, understanding what it is, balancing social media, and more.

6.6 | Physical Health Basics

Estimated completion time: 32 minutes.

Questions to Consider:

- What is healthy eating?
- Why is it important to stay hydrated?
- How important is exercise to a healthy body?
- Are you getting enough sleep to be healthy?
- What are toxins, and how can they affect your health?

You have one body. Treat it well so as to maximize its ability to serve you throughout your life. Often physical health gets moved to the bottom of the priority list when we are busy. Taking care of your physical health doesn't mean six-pack abs or training for a marathon. It means honoring your physical needs so your body can function properly, feeding your cells the nutrients that will keep your body working well your entire life, and minimizing exposure to toxins to reduce your risk of disease.

Healthy Eating

While it's not the only thing that contributes to great health, what you eat makes a huge difference. We have 37 trillion cells in our body. The only way they function optimally is with good nutrition. As a college student,

you will be surrounded by temptations to eat poorly. Although it is okay to choose unhealthy food options in moderation, your goal will be to focus on making healthier choices to fuel your mind and body daily.

One way to ensure you are making healthy meal choices is by using the United States Department of Agriculture (USDA) Healthy Plate Guidelines. MyPlate illustrates five different food groups considered the building blocks for a healthy plate for each meal—vegetables, fruits, protein, grains, and dairy.
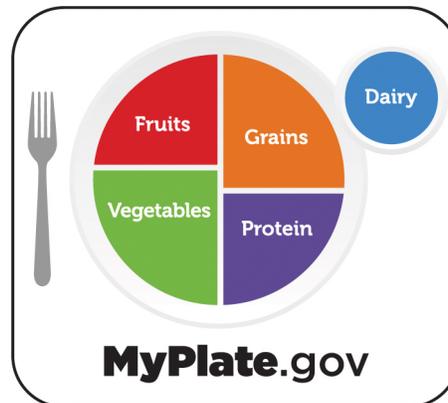

Figure 6.8 Eating healthy is a journey shaped by many factors, including our state of life, situations, preferences, access to food, culture, traditions, and the personal decisions we make over time. The USDA recommends that vegetables and fruits make up the largest portions of your diet, and to be mindful of your servings of carbohydrates, proteins, and dairy. MyPlate offers ideas and tips to help you create a healthier eating style that meets your individual needs and improves your health. (Credit: USDA / Public Domain)

Whole Foods vs. Processed Foods

Choose whole foods. Whole foods are any foods that have not been processed, packaged, or altered in any way. Whole foods are an essential part of a healthy diet because they contain the vitamins and minerals our bodies need.

Examples of whole foods include the following:

- **Vegetables:** Carrots, broccoli, kale, avocados, cauliflower, spinach, peppers
- **Fruits:** Apples, bananas, blueberries, strawberries, grapes, melons, peaches
- **Grains:** Brown rice, oatmeal, barley, buckwheat, quinoa, millet
- **Beans:** Black, pinto, kidney, black-eyed peas, chickpeas

Minimize **non-whole foods**, often called processed foods. These are foods that have been processed, such as cookies, hot dogs, chips, pasta, deli meat, and ice cream. Even seemingly healthy foods like yogurt, granola, and other cereals are processed and should be checked for added sugar and other unhealthy ingredients. Review the label on these items and look for products that have less than 5 grams of fat and 10 grams of added sugars per serving. Also, review the dietary fiber and select products that have at least 3 grams per serving. Dietary fiber is a good thing; the higher the number the better. Fiber makes you feel full, and helps with digestion. Following these simple guidelines will help you select the best foods.

The average American eats 62 percent of their daily calories from processed foods.[22] In order for your body to be as healthy as possible, it's extremely important to include lots of whole foods in your diet.

> **"When you eat junk food you think junk thoughts."**
>
> — Michael Bernard Beckwith

How to Read a Food Label

The U.S. government requires food manufacturers to put a label on every processed food product. This is so we, as consumers, know what we are putting into our bodies and can make good dietary choices. A quick review of the label will provide a lot of important information about what you are eating, yet most people don't

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22 Dr. Joel Furhman https://www.mensjournal.com/features/joel-fuhrman-the-doctor-is-out-there-20121107/

take the time to read the label. This is a big mistake.

Think of the front of the package as a marketing billboard. Don't be fooled by the marketing. Every day millions of dollars are spent to persuade us to eat foods that are not healthy for us. Through visuals and words (like natural, healthy, or gluten free), the food industry wants us to make assumptions about the nature of a food product without looking at the facts. For example, many people eat protein bars thinking they are a healthy choice, but protein bars can have up to 30 grams of sugar! Understanding the nutrition information and ingredients will help you make healthier choices. When you take the time to read the labeled ingredients, you are no longer being marketed to—you are staring at the facts.

Figure 6.9 This label displays the key nutritional information about a common container of fruit salad. Though fruit is generally healthy, be aware of the amount of calories and sugars, and particularly the serving size to which those amounts are tied. (Credit: U.S. Food and Drug Administration/Public Domain)

This video on how to read a food label (https://openstax.org/l/foodlabels) is a helpful overview on what else to look for.

What You Drink

What is your go-to drink when you are thirsty? Soda? Juice? Coffee? How about water? Most of your blood and every cell in your body is composed of water. In fact, water makes up 60 to 80 percent of our entire body mass,

so when we don't consume enough water, all kinds of complications can occur. To function properly, all the cells and organs in our body need water. Proper hydration is key to overall health and well-being. By the time you feel thirsty, you are already dehydrated. Dehydration is when your body does not have as much water and fluids as it needs.

Researchers at Virginia Polytechnic discovered that mild dehydration (as little as losing 1 to 2 percent of body water) can impair cognitive performance.[23] Water increases energy and relieves fatigue, helps maintain weight, flushes toxins, improves skin complexion, improves digestion, and is a natural headache remedy (your brain is 76 percent water). Headaches, migraines, and back pains are commonly caused by dehydration. Your body will also let you know it needs water by messaging through muscle cramps, achy joints, constipation, dry skin, and of course a dry mouth.

Aside from feeling thirsty, the easiest way to tell if you are dehydrated is to check your urine. If it is a dark shade of yellow, your urine is over-concentrated with waste. Water helps to flush out waste, so when you're hydrated there's a higher ratio of water to waste, turning your urine a lighter color.

One of the best habits you can develop is to drink a large glass of water first thing in the morning. Your body becomes a little dehydrated as you sleep. Drinking water first thing in the morning allows your body to rehydrate, which helps with digestion and helps move the bowels for regularity in the morning. It also helps to eliminate the toxins your liver processed while you slept.

Check out this video (https://openstax.org/l/drinkwater) for more benefits of drinking water.

"But I don't like the taste of water!" No problem. Select any non-caloric beverage. Flavored waters are a perfect choice and there are many options with and without bubbles or caffeine. Limit your intake of caloric beverages such as juice, soda, and high calorie beverages at your favorite coffee shop.

Exercise

Many people exercise to maintain or lose weight, or increase cardiovascular health, but physical outcomes are only one potential benefit of exercise. Regular exercise can improve the quality of your sleep, strengthen your bones, increase your energy levels, and reduce your risk of high blood pressure, diabetes, and even some forms of cancer.[24] Regular exercise is key to living a long, healthy life.

There are three basic types of exercise—flexibility, strength training, and cardiovascular.

1. **Flexibility** is the range in motion of the joints in your body, or the ability for your muscles to move freely. Without adequate flexibility, daily activities can become difficult to do. Stretching increases your body's flexibility, improves circulation, and sends more blood to your muscles. Just a few minutes a day of deep stretching can have a powerfully positive impact on your health. Yoga and Tai Chi are other wonderful ways to improve your flexibility.
2. **Strength** is the body's ability to produce force. Strength training helps improve muscle strength and muscle mass, which will become increasingly important as you age. Increased muscle helps your body burn calories more efficiently. Strength training also helps maintain bone strength. In addition to lifting weights, other ways to build strength include push-ups, pull-ups, squats, lunges, and yoga.
3. **Cardiovascular** is the body's ability to use oxygen efficiently during exercise. As one's ability to use oxygen improves, daily activities can be performed with less fatigue. Great cardiovascular modes of exercise include jogging, swimming, biking, and HIIT (high intensity interval training). HIIT is short bursts of intense activity followed by a rest period. With HIIT, you can squeeze a lot of benefit into a short period of time. Click here for an example of HITT workouts (https://openstax.org/l/hiitworkout).

23   University of Virginia https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4207053/
24   Harvard Medical School https://www.health.harvard.edu/newsletter_article/Exercise_as_medicine

Figure 6.10 Your college may offer a variety of unique and interesting exercise programs and classes, which you can take advantage of to learn new things and stay fit. (Credit: Jo Allebon / Flickr / Attribution 2.0 Generic (CC-BY 2.0))

Research indicates that regular aerobic exercise can support memory and cognition. In these studies, aerobic exercise generally increases the number of new neurons created in the brain's memory center and also reduces inflammation.[25] Inflammation in the brain may contribute to the development of dementia and other neurodegenerative conditions. It might be good timing to take a jog before you sit down to study for a test!

It's important to move throughout the day, and every day. Aim to exercise for 150 minutes a week. You don't have to be the king or queen of CrossFit; it's the daily movement that is most important. Research has found that three brisk walks for 10 minutes a day is a great start. While it is best to integrate all three types of exercise, the best exercise is the one you will actually do. Find and commit to a form of exercise you will enjoy.

Sleep

How often do you wake up filled with energy, eager to embrace the day? How often do you wake up still tired, with heavy eyes that just don't want to open? Your answer to these questions has a direct bearing on the quality of your decisions, your ability to use good judgment, the extent to which you can focus in the classroom, and ultimately your long-term health.

A great night's sleep begins the minute you wake up. The choices you make throughout the day impact how quickly you fall asleep, whether you sleep soundly, and whether your body is able to successfully complete the cycle of critical functions that only happen while you sleep.

Sleep is the foundation of health, yet almost 40 percent of adults struggle to get enough sleep.[26] Lack of sleep affects mental and physical performance and can make you more irritable. The diminished energy that results from too little sleep often leads us to make poor decisions about most things, including food. Think about the last time you were really tired. Did you crave pizza, donuts, and fries—or a healthy salad? Studies have shown that people who sleep less are more likely to eat fewer vegetables and eat more fats and refined carbohydrates, like donuts.[27]

With sufficient sleep it is easier to learn, to remember what you learned, and to have the necessary energy to make the most of your college experience. Without sufficient sleep it is harder to learn, to remember what you learned, and to have the energy to make the most of your college experience. It's that simple.

What Happens When We Sleep?

Sleep is a time when our bodies are quite busy repairing and detoxifying. While we sleep we fix damaged

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25   Kelty, Journal of Applied Physiology
26   Cleveland Clinic, https://health.clevelandclinic.org/lack-sleep-make-crave-junk-food/
27   Cleveland Clinic, https://health.clevelandclinic.org/lack-sleep-make-crave-junk-food/

tissue, toxins are processed and eliminated, hormones essential for growth and appetite control are released and restocked, and energy is restored.

A review of hundreds of sleep studies concluded that most adults need around eight hours of sleep to maintain good health. Some people may be able to function quite well on seven and others may need closer to nine, but as a general rule, most people need a solid eight hours of sleep each night. And when it comes to sleep, both quantity and quality are important.

When sleep is cut short, the body doesn't have time to complete the phases for the repair and detoxification.

A tiny lobe called the pineal gland helps us fall asleep. The pineal gland secretes melatonin to calm the brain. The pineal gland responds to darkness. If you are watching TV until the minute you go to bed and then sleep with the artificial light from smartphones and other devices, your brain is tricked into thinking it is still daylight; this makes it difficult for the pineal gland to do its job. In addition, if the TV shows you watch before bed are violent or action-packed, your body will release cortisol (the stress hormone). Anything that creates stress close to bedtime will make it more difficult to fall asleep. A bedtime practice of quiet activities like reading, journaling, listening to music, or meditation will make it much easier to fall asleep.

What Happens If You Don't Get Enough Sleep?

Lack of sleep has a big impact on your overall state of health and well-being. Studies have linked poor sleep to a variety of health problems. The U.S. Centers for Disease Control and Prevention have identified sleep deprivation as a public health epidemic.

Effects of Sleep Deprivation

- Irritability
- Cognitive impairment
- Memory lapses or loss
- Impaired moral judgement
- Severe yawning
- Hallucinations
- Symptoms similar to ADHD
- Impaired immune system
- Risk of diabetes Type 2

- Increased heart rate variability
- Risk of heart disease

- Increased reaction time
- Decreased accuracy
- Tremors
- Aches

Other:
- Growth suppression
- Risk of obesity
- Decreased temperature

Figure 6.11 The Effects of Sleep Deprivation This visual depicts many of the ways we are affected by insufficient sleep. (Credit: Häggström, Mikael (2014). "Medical gallery of Mikael Häggström 2014". *WikiJournal of Medicine*. Public Domain.)

Some of the health risks of insufficient sleep include the following:

Increased risk of heart attack and stroke: In his book *Why We Sleep*, Matthew Walker, PhD, shares Japanese research showing that male workers who average six hours of sleep or less are 400 to 500 percent more likely to suffer one or more cardiac arrests than those getting more than six hours of sleep each night. Another study of women between the ages of 20 and 79 found that those who had mild sleep disturbance such as taking longer to fall asleep or waking up one or more times during the night were significantly more likely to have high blood pressure than those who fell asleep quickly and slept soundly.[28]

Impaired cognitive function: Even one night of sleeping less than six hours can impact your ability to think clearly the next day.

28   Matthew Walker, PhD *Why We Sleep*

Increased risk of accidents: Sleep deprivation slows your reaction time, which increases your risk of accidents. You are three times more likely to be in a car crash if you are tired.

According to the American Sleep Foundation, 40 percent of people admitted to falling asleep behind the wheel at least once. A Governor's Highway Safety Association report estimates there are 6,400 fatal drowsy-driving crashes each year. Fifty percent of these crashes involve drivers under the age of 25.[29]
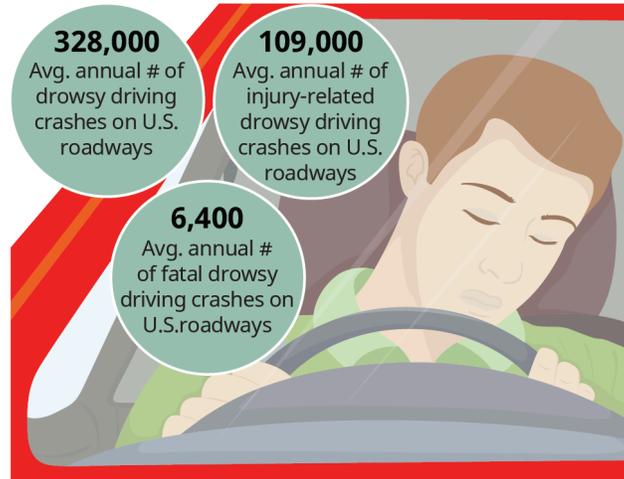
Figure 6.12 Driving while drowsy puts you, your passengers, and many others in danger. (Credit: Modification of work by Governors Highway Safety Association.)

Driving after 20 hours without sleep is the equivalent of driving with a blood-alcohol concentration of 0.08 percent—the U.S. legal limit for drunk driving.

Weight gain/increased risk for obesity: Sleep helps balance your appetite by regulating hormones that play a role in helping you feel full after a meal. Also, cortisol is released during times of anxiety, and exhaustion causes your body to produce more cortisol. This can stimulate your appetite.

Increased risk of cancer: Tumors grow up to three times faster in laboratory animals with severe sleep dysfunctions. Researchers believe this is because of disrupted melatonin production, as melatonin has both antioxidant and anticancer activity.

Increased emotional intensity: The part of the brain responsible for emotional reactions, your amygdala, can be 60 percent more reactive when you've slept poorly, resulting in increased emotional intensity.

For more information on the advantages and health risks of sleep watch this TED Talk (https://openstax.org/l/sleepsuperpower) by Matt Walker, PhD, Director of the Sleep Center at U California Berkeley.

Tips to Improve the Quality of Your Sleep

Now that you are more aware of the ways insufficient sleep harms your body, let's review some of the things you can do to enhance your sleep.

Make sleep a priority.

It can be challenging in college, but try to get on a schedule where you sleep and wake at the same time every day to get your body accustomed to a routine. This will help your body get into a sleep rhythm and make it easier to fall asleep and get up in the morning.

Sleep in a cool, quiet, dark room.

29   Governors Highway Safety Association

Create a sleeping environment that is comfortable and conducive to sleep. If you can control the temperature in your room, keep it cool in the evening. Scientists believe a cool bedroom (around 65 degrees) may be best for sleep, since it mimics our body's natural temperature drop. Exposure to bright light suppresses our body's ability to make melatonin, so keep the room as dark as possible. A 2010 study in *The Journal of Clinical Endocrinology & Metabolism* found that individuals exposed to room light "during the usual hours of sleep suppressed melatonin by greater than 50%."[30] Even the tiniest bit of light in the room (like from a clock radio LCD screen) can disrupt your internal clock and your production of melatonin, which will interfere with your sleep. A sleep mask may help eliminate light, and earplugs can help reduce noise.

Avoid eating late or drinking alcohol or caffeine close to bedtime.

It is best to finish eating at least two hours before bedtime and avoid caffeine after lunch. While not everyone is affected in the same way, caffeine hangs around a long time in most bodies. Although alcohol will make you drowsy, the effect is short-lived and you will often wake up several hours later, unable to fall back to sleep. Alcohol can also keep you from entering the deeper stages of sleep, where your body does most of the repair and healing. A 2013 *Scientific Research* study concluded that "energy drinks, other caffeinated beverages and alcoholic beverages are risk factors of poor sleep quality." It's important to finish eating hours before bedtime so your body is able to heal and detoxify and it is not spending the first few hours of sleep digesting a heavy meal.

Start to wind down an hour before bed.

Making mindfulness and/or a gratitude practice (as discussed previously) a part of your bedtime routine are well documented as improving individuals ability to fall asleep and have better quality of sleep. There are also great apps to help with relaxation, stress release, and falling asleep which include mediations, gratitude practice, and mindfulness. Consider the Insight Timer (https://openstax.org/l/insighttimer) app, or any of the free apps (https://openstax.org/l/sleepapps) listed by the American Sleep Association.

Exercise for 30 minutes a day.

One of the biggest benefits of exercise is its effect on sleep. A study from Stanford University found that 16 weeks in a moderate-intensity exercise program allowed people to fall asleep about 15 minutes faster and sleep about 45 minutes longer. Walking, yoga, swimming, strength training, jumping rope—whatever it is, find an exercise you like and make sure to move your body every day.

Improve your diet.

Low fiber and high saturated fat and sugar intake is associated with lighter, less restorative sleep with more wake time during the night. Processed food full of chemicals will make your body work extra hard during the night to remove the toxins and leave less time for healing and repair.

Sleep affects how we look, feel, and function on a daily basis and is vital to our health and quality of life. When you get the sleep your body needs, you look more vibrant, you feel more vibrant, and you have the energy to live your best life.

Now, with a better understanding of the benefits of getting the recommended hours of nightly sleep and the health risks of not getting enough sleep, what changes can you make to improve the quality and quantity of your sleep?

Difficulty sleeping may be a sign of something else happening in your mind or body (i.e., anxiety, insomnia, sleep apnea). If you are doing all the right things and still have trouble falling or staying asleep, talk to your doctor or go to your student health services.

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30   JCEM, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3047226/

Here are some resources to learn more:

- Healthy Sleep (https://openstax.org/l/gettingsleep), Harvard Medical School Division of Sleep Medicine
- Insomnia Treatment (https://openstax.org/l/insomniatreatment), American Association of Sleep Medicine
- Sleep Medicine (https://openstax.org/l/behaviroalsleepmedicine), Society of Behavioral Sleep Medicine

🗈 Summary

As you learned in this chapter, your college experience will be impacted by your own health and well-being. During these years, you will start the process of learning who you are and who you want to be. Your values will be questioned and your strengths will become more apparent not only to you but also to your support system. The goal of this chapter was to introduce you to the complex relationship between your mind and body; to help you identify the differences between feeling stressed versus being anxious; and to know when feeling sad may be symptoms of depression.

This foundational knowledge will help to empower you to not only improve your self-efficacy, but also help you become more resilient during difficult situations. With the hope you can continue to grow in this area and improve your health and well-being, consider one of the items below and commit to setting it as your new top priority:

- Reach out to your support system and start the conversation with a person you have identified as an important support for your health. Tell them why you included them and let them know that you value them as a key person in your life.
- Identify other strategies that you can turn to during difficult times. Talk to your friends to learn how they handle difficult situations and if they have specific strategies that help them through such times.
- Consider the resources available to you on campus. Are there classes that can help you learn to meditate or how to handle stress? Where is the student health service and what treatment and prevention opportunities are provided for students?
- Think back to situations that did not go smoothly in the past. What knowledge and skills can you take from this chapter and apply to that situation which would have a different, more positive outcome. If a similar situation happens again, what would you do differently?

Figure 7.1 Financial success depends on getting a good start and avoiding setbacks and wrong turns. It's a lifelong process, more like a marathon than a sprint. (Credit: Bengt Nyman / Flickr / Attribution 2.0 Generic (CC-BY 2.0))

Chapter Outline

7.1 Personal Financial Planning
7.2 Savings, Expenses, and Budgeting
7.3 Credit Cards
7.4 Paying for College

✎ Introduction

Student Survey

How financially literate are you? This survey will help you determine how the chapter concepts relate to you right now. As we are introduced to new concepts and practices, it can be informative to reflect on how your understanding changes over time. Take this quick survey to figure it out, ranking the statements on a scale of 1–4, 1 meaning "least like me" and 4 meaning "most like me."

1. I actively and regularly plan and/or monitor my finances.
2. I understand the benefits and risks of credit.
3. I have a plan to repay my student loans.
4. I regularly take steps to protect my identity and assets.

You can also take the Chapter 7 survey (https://openstax.org/l/collegeconcisesurvey07) anonymously online.

STUDENT PROFILE

"A big part of the college experience for many students is the art of the student loan process. This has been both a painful and challenging experience for me over the course of the first semester. The biggest struggle for me has been simply understanding what everything means and what I'm supposed to do.

Another challenge has been determining how exactly I'm going to pay these loans back while also saving for rent, utilities, additional expenses, and a study abroad fund with a part-time job that I don't even have yet."

—**Hanna Moyster** University of Central Arkansas

About This Chapter

In this chapter, you will learn to reach your personal life goals by implementing financial planning and strategies to protect yourself, manage your money today, and put yourself in a better position for tomorrow. How you act today impacts your tomorrow.

By the end of this chapter, you should be able to do the following:

- Align your personal and financial goals through smart financial planning.
- Create a saving and spending plan and track your performance.
- Identify best practices and risks associated with credit cards and other debt.
- Determine the best opportunities for you to finance your college education.

What Would You Do?

Think about this scenario: Everything was working out for Elan. They got into the college they wanted to, and some friends were planning to attend as well. They felt like an adult and were looking forward to new freedoms and opportunities. Elan's parents let them get a credit card after high school graduation. Elan shared an apartment with their friends just off campus, and was able to get where they needed to go because they had a car. Elan had also saved over $1,000 from gifts and a summer job. They needed a new laptop.

Elan planned to stay within set limits. They went to the store and found a very knowledgeable salesperson, Jermain, who said he knew exactly what Elan needed. Jermain pointed out that the laptop in Elan's budget would do schoolwork just fine, but it was not as powerful as the best unit with advanced gaming features. Plus, the better computer came with new headphones! Jermain suggested that Elan could later sell the computer to incoming students. (Most first-year students bought used computers if they did not have one when they came to school.) The high-powered computer was $2,000, though, and Elan didn't have that much money. Maybe they should use the credit card? Maybe their new part-time job would pay for it? But Jermain arranged for a small down payment and monthly payments of only $100. That did not seem too bad to Elan. The future looked bright.

At least, that's what Elan thought. They soon realized that working more hours meant fewer hours to study. Meanwhile, Elan's rent and gas usage went up, and, as a young car owner, their insurance was through the roof. Only three months into the first semester, Elan missed a payment on the laptop and accrued a late fee. They put the next laptop payment on the credit card. Soon, Elan was alternating payments between the credit card, laptop, and car, building up interest and late charges. Now Elan was having trouble paying their rent and started getting calls from creditors. Everything had seemed so promising. Elan didn't know where they had gone wrong.

Elan comes to you and shares the situation. They ask, "What could I have done differently?"

This chapter offers you insight into your finances so that you can make good decisions and avoid costly mistakes. We all face chances to spend money to try to get what we want. Many think only about now and not next month, next year, or ten years from now, but our behavior now has consequences later. Not everyone can own all the latest technology, drive their dream car, continually invest for their retirement, or live in the perfect home at this moment. But by understanding the different components of earning money, banking, credit, and budgeting, you can begin working toward your personal and financial goals. We'll also discuss a related topic, safeguarding your accounts and personal information, which is critical to protecting everything you've worked

for. By the end of this chapter, you will have good insights for Elan . . . and yourself!

7.1 | Personal Financial Planning

Estimated completion time: 13 minutes.

Questions to Consider:

- What simple steps do I take to create a financial plan?
- How do I use financial planning in everyday life?
- How is the financial planning process implemented for every purchase?

"By failing to plan, you are preparing to fail."

—Benjamin Franklin

Honestly, practicing money management isn't that hard to figure out. In many ways it's similar to playing a video game. The first time you play a game, you may feel awkward or have the lowest score. Playing for a while can make you okay at the game. But if you learn the rules of the game, figure out how to best use each tool in the game, read strategy guides from experts, and practice, you can get really good at it.

Money management is the same. It's not enough to "figure it out as you go." If you want to get good at managing your money, you must treat money like you treat your favorite game. You have to come at it with a well-researched plan. Research has shown that people with stronger finances are healthier[1] and happier,[2] have better marriages,[3] and even have better cognitive functioning.[4]

The Financial Planning Process

Personal goals and behaviors have a financial component or consequence. To make the most of your financial resources, you need to do some financial planning. The financial planning process consists of five distinct steps: goal setting, evaluating, planning, implementing, and monitoring.

Financial Planning in Five Steps

1. Develop Personal Goals
   - What do I want my life to look like?

2. Identify and Evaluate Alternatives for Achieving Goals for My Situation
   - What do my savings, debt, income, and expenses look like?
   - What creative ways are available to get the life I want?

3. Write My Financial Plan
   - What small steps can I take to start working toward my goals?

4. Implement the Plan
   - Begin taking those steps, even if I can only do a few small things each week.

5. Monitor and Adjust the Plan
   - Make sure I don't get distracted by life. Keep taking those small steps each week. Make adjustments when needed.

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1 https://www.sciencedirect.com/science/article/pii/S0277953613002839
2 https://academic.oup.com/geronj/article-abstract/38/5/626/578092
3 https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1741-3729.2012.00715.x and http://onlinelibrary.wiley.com/doi/10.1111/j.1741-3729.2012.00715.x/abstract
4 https://science.sciencemag.org/content/341/6149/976%20

Figure 7.2 Steps of financial planning.

How to Use Financial Planning in Everyday Life

The financial planning process isn't only about creating one big financial plan. You can also use it to get a better deal when you buy a car or computer or rent an apartment. In fact, any time you are thinking about spending a lot of money, you can use the financial planning process to pay less and get more.

To explore financial planning in depth, we'll use the example of buying a car.

1. Develop Goals

First, what do you really need? If you're looking for a car, you probably need transportation. Before you decide to buy a car, consider alternatives to buying a car. Could you take a bus, walk, or bike instead? Often one goal can impact another goal. Cars are typically not good financial investments. We have cars for convenience and necessity, to earn an income and to enjoy life. Financially, they are an expense. They lose value, or depreciate, rather than increasing in value, like savings. So buying a car may slow your savings or retirement plan goals. Cars continually use up cash for gas, repairs, taxes, parking, and so on. Keep this in mind throughout the planning process.

2. Identify and Evaluate Alternatives for Achieving Goals in Your Current Situation.

For this example, let's assume that you have determined the best alternative is to buy a car. Do you need a new car? Will your current car last with some upkeep? Consider a used car over a new one. On average, a new car will lose one-fifth of its value during its first year.[5] Buying a one-year-old car is like getting a practically new car for a 20 percent discount. So in many cases, the best deal may be to buy a five- or six-year-old car. Sites such as the Kelley Blue Book website (KBB.com) and Edmunds.com can show you depreciation tables for the cars you are considering. Perhaps someone in your family has a car they will sell you at a discount.

Do you know how much it will cost in total to own the car? It will help to check out the total cost of ownership tools (also on KBB.com and Edmunds.com) to estimate how much each car will cost you in maintenance, repairs, gas, and insurance. A cheap car that gets poor gas mileage and breaks down all the time will actually cost you more in the long run.

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5   Krome, Charles. "Car Depreciation." 2018, Carfax. https://www.carfax.com/blog/car-depreciation

Figure 7.3 Weighing all the factors is critical when deciding on any purchase, especially a major one like a car. (Credit: Greg Gjerdingen / Flickr / Attribution 2.0 Generic (CC-BY 2.0))

3. Write Down Your Financial Plan

Goal	Item	Details	Budget	Timeline
Transportation/ Car	2014 Toyota Camry	Black, A/C, power windows, less than 60,000 miles	Car $12,000 (max) Down payment $3,000 Insurance $100/ mo Sales tax $900 + Licensing $145 Cash needed $4,145	Have $3600 in savings for this. Save $50/week. Purchase in approximately 11 weeks.
Computer	Used or refurbished laptop	Dell w/ Windows, minimum 13", 128G hard drive, HD Graphics	$300 Use free Windows update from school. Use free Wi-Fi at school.	Sell current laptop for $100. Buy refurbished from Dell site for $289. $189 on credit card. Pay off when statement comes.

Table 7.1 Examples of financial plans for a car and a computer.

4. Implement Your Plan

Once you've narrowed down which car you are looking for, do more online research with resources such as

Kelley Blue Book to see what is for sale in your area. You can also begin contacting dealerships and asking them if they have the car you are looking for with the features you want. Ask the dealerships with the car you want to give you their best offer, then compare their price to your researched price. You may have to spend more time looking at other dealerships to compare offers, but one goal of online research is to save time and avoid going from place to place if possible.

When you do go to buy the car, bring a copy of your written plan into the dealership and stick to it. If a dealership tries to switch you to a more expensive option, just say no, or you can leave to go to another dealership. Remember Elan in our opening scenario? They went shopping alone and caved to the pressure and persuasion of the salesperson. If you feel it is helpful, take a responsible friend or family member with you for support.

5. Monitor and Adjust the Plan to Changing Circumstances and New Life Goals

Life changes, and things wear out. Keep up the recommended maintenance on the car (or any other purchase). Keep saving money for your emergency fund, then for your next big purchase. The worst time to buy something is when you need to replace an important item that stops working or is damaged, because you are easier to take advantage of when you are desperate. You will be glad that you have an emergency fund.

A good practice is to keep making car payments once the car loan is paid off. If you are paying $300 per month for a car loan, when the loan is paid off, put $300 per month into a savings account for a new car instead. Do it long enough and you can buy your next car using your own money!

Use the Financial Planning Process for Everything

The same process can be used to make every major purchase in your life. When you rent an apartment, begin with the same assessment of your current financial situation, what you need in an apartment, and what goals it will impact or fulfill. Then look for an apartment using a written plan to avoid being sold on a more expensive place than you want.

You can even use the process of assessing and planning for small things such as buying textbooks or weekly groceries. While saving a few bucks each week may seem like a small deal, you will gain practice using the financial planning process, so it will become automatic for when you make the big decisions in life. Stick to your plan.

7.2 | Savings, Expenses, and Budgeting

Estimated completion time: 19 minutes.

Questions to Consider:

- How is the flow of money best measured?
- How do I keep things balanced?

  "Do not save what is left after spending; instead spend what is left after saving."

  —Warren Buffett[6]

What is the best way to get to the Mississippi River from here? Do you know? To answer the question, even with a map app, you would need to know where you are starting from and exactly where on the river you want to arrive before you can map the best route. Our financial lives need maps, too. You need to know where you are now and where you want to end up in order to map a course to meet the goal.

You map your financial path using a spending and savings plan, or budget, which tracks your income, savings,

6   Buffett, Warren. The Essays of Warren Buffett: Lessons for Corporate America. 1991. Cardozo Law Review.

and spending. You check on your progress using a balance sheet that lists your *assets,* or what you own, and your *liabilities*, or what you owe. A balance sheet is like a snapshot, a moment in time, that we use to check our progress.

Budgets

The term *budget* is unpleasant to some people because it just looks like work. But who will care more about your money than you? We all want to know if we have enough money to pay our bills, travel, get an education, buy a car, etc. Technically, a budget is a specific financial plan for a specified time. Budgets have three elements: income, saving and investing, and expenses.
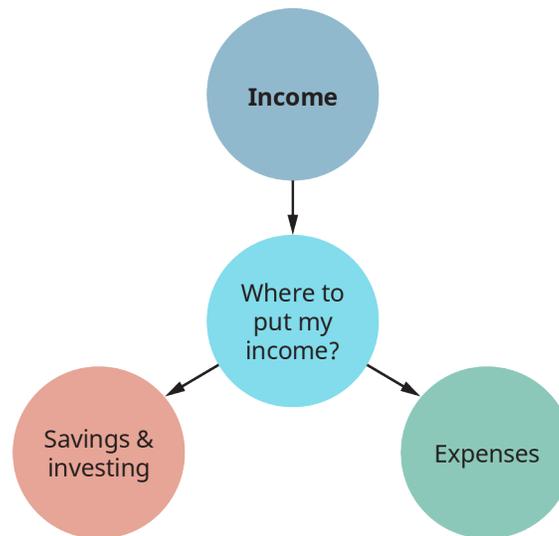

Figure 7.4 A budget is a specific financial plan for a finite amount of time. For example, you can set a budget for a term or longer, but be sure to revisit it to make adjustments as needed.

Income

Income most often comes from our jobs in the form of a paper or electronic paycheck. During school, you may receive support from family that could be considered income. You may also receive scholarships, grants, or student loan money. When listing your income for your monthly budget, you should use your *net pay*, also called your disposable income. It is the only money you can use to pay bills. If you currently have a job, look at the pay stub or statement. You will find *gross pay*, then some money deducted for a variety of taxes, leaving a smaller amount—your net pay.

Sometimes you have the opportunity to have some other, optional deductions taken from your paycheck before you get your net pay. Examples of optional deductions include 401(k) or health insurance payments. You can change these amounts, but you should still use your net pay when considering your budget.

Some individuals receive disability income, social security income, investment income, alimony, child support, and other forms of payment on a regular basis. All of these go under income.

Saving and Investing

The first bill you should pay is to yourself. You owe yourself today and tomorrow. The quote at the start of this section was said by Warren Buffet who is one of the most successful investors of the 20th century, with a personal fortune of more than $60 billion. Setting aside a certain amount of money for savings and investments, before paying bills and making discretionary, or optional, purchases, will put you on a path to building your own reserve. Savings can be for an emergency fund or for short-term goals such as education, a wedding, travel, or a car. Investing, such as putting your money into stocks, bonds, or real estate, offers higher returns at a higher risk than money saved in a bank. Investments include retirement accounts that can be automatically funded with money deducted from your paycheck. Automatic payroll deductions are an effective

way to save money before you can get your hands on it. Make saving money a priority to assure that you will work as hard to make the payment to yourself as you work to make your car or housing payment. The money you "pay" toward saving or investing will earn you back your money, plus some money earned on your money. Compare this to the cost of buying an item on credit and paying your money plus interest to a creditor. Paying yourself first is a habit that pays off!

Pay yourself first! Put something in savings from every paycheck or gift.

Expenses

Expenses are categorized in two ways. One method separates them into fixed expenses and variable expenses. Rent, insurance costs, and utilities (power, water) are fixed: they cost about the same every month and are predictable based on your arrangement with the provider. Variable expenses, on the other hand, change based on your priorities and available funds; they include groceries, restaurants, cell phone plans, gas, clothing, and so on. You have a good degree of control over your variable expenses. You can begin organizing your expenses by categorizing each one as either fixed or variable.

A second way to categorize expenses is to identify them as either needs or wants. Your needs come first: food, basic clothing, safe housing, medical care, and water. Your wants come afterward, if you can afford them while sticking to a savings plan. Wants may include meals at a restaurant, designer clothes, video games, other forms of entertainment, or a new car. After you identify an item as a need or want, you must exercise self-control to avoid caving to your desire for too many wants.

ACTIVITY

List the last ten purchases you made, and place each of them in the category you think is correct.

Item	Need Expense $	Want Expense $
Totals		

Table 7.2

How do your total "need" expenses compare to your total "want" expenses? Should either of them change?

Budgets are done in a chart or spreadsheet format and often look like the ones below. Pay attention to how the first budget differs from the second.

Income (use net monthly pay)	
Paycheck	$2200
Other	$300
Total Income	**$2500**
Saving and Investing	
Savings Account	$120
Investments	$240
Amount Left for Expenses	$2140
Expenses (Monthly)	
Housing	$750
Car Payment/Insurance	$450
Groceries	$400
Restaurants/Food Delivery	$100
Internet	$60
Phone	$60
Medical Insurance and Copays	$120
Gas	$200
Total Expenses	**$2140**
Balance (Amount left for expenses minus total expenses)	$0

Table 7.3 This budget balances because all money is accounted for.

Income (use net monthly pay)	
Paycheck	$2200

Table 7.4 Note that this budget is out of balance because Restaurants, Phone, and Gas are more expensive, so the total expenses are more than the amount available to pay for them.

Other	$300
Total Income	**$2500**
Saving and Investing	
Savings Account	$120
Investments	$240
Amount Left for Expenses	$2140
Expenses (Monthly)	
Housing	$750
Car Payment/Insurance	$450
Groceries	$400
Restaurants/Food Delivery	$225
Internet	$60
Phone	$75
Medical Insurance and Copays	$120
Gas	$250
Total Expenses	**$2330**
Balance (Amount left for expenses minus total expenses)	**-$190**

Table 7.4 Note that this budget is out of balance because Restaurants, Phone, and Gas are more expensive, so the total expenses are more than the amount available to pay for them.

Balancing Your Budget

Would you take all your cash outside and throw it up in the air on a windy day? Probably not. We want to hold on to every cent and decide where we want it to go. Our budget allows us to find a place for each dollar. We should not regularly have money left over. If we do, we should consider increasing our saving and investing. We also should not have a negative balance, meaning we don't have enough to pay our bills. If we are short of money, we can look at all three categories of our budget: income, savings, and expenses.

We could increase our income by taking a second job or working overtime, although this is rarely advisable alongside college coursework. The time commitment quickly becomes overwhelming. Another option is to cut

savings, or there's always the possibility of reducing expenses. Any of these options in combination can work.

Another, even less desirable option is to take on debt to make up the shortfall. This is usually only a short-term solution that makes future months and cash shortages worse as we pay off the debt. When we budget for each successive month, we can look at what we actually spent the month before and make adjustments.

Tracking the Big Picture

When you think about becoming more financially secure, you're usually considering your *net worth*, or the total measure of your wealth. Earnings, savings, and investments build up your assets—that is, the valuable things you own. Borrowed money, or debt, increases your liabilities, or what you owe. If you subtract what you owe from what you own, the result is your net worth. Your goal is to own more than you owe.

When people first get out of college and have student debt, they often owe more than they own. But over time and with good financial strategies, they can reverse that situation. You can track information about your assets, liabilities, and net worth on a balance sheet or part of a personal financial statement. This information will be required to get a home loan or other types of loans. For your net worth to grow in a positive direction, you must increase your assets and decrease your liabilities over time.

Assets (Owned) – Liabilities (Owed) = Net Worth

ANALYSIS QUESTION

Can you identify areas in your life where you are losing money by paying fees on your checking account or interest on your loans? What actions could you take to stop giving away money and instead set yourself up to start earning money?

Good Practices That Build Wealth	Bad Practices That Dig a Debt Hole
Tracking all spending and saving	Living paycheck to paycheck with no plan
Knowing the difference between needs and wants	Spending money on wants instead of saving
Resisting impulse buying and emotional spending	Using credit to buy more that you need and increasing what you owe

Table 7.5

GET CONNECTED

You can write down your budget on paper or using a computer spreadsheet program such as Excel, or you can find popular budgeting apps that work for you.[7] Some apps link to your accounts and offer other services such as tracking credit cards and your credit score. The key is to find an app that does what you need and use it.

Here are some examples:

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7 http://www.techtimes.com/articles/80726/20150902/best-budgeting-apps-for-college-students-mint-you-need-a-budget-and-more.htm

- [Mint (https://openstax.org/l/mint)](https://openstax.org/l/mint)
- [Wally (https://openstax.org/l/wally)](https://openstax.org/l/wally)
- [Goodbudget (https://openstax.org/l/goodbudget)](https://openstax.org/l/goodbudget)

7.3 | Credit Cards

Estimated completion time: 15 minutes.

Questions to Consider:

- How dangerous is debt?
- What should I think about when getting and using a credit card?
- What is the purpose of a credit score?

Yes, taking on too much debt can (and does) have disastrous effects on people's personal finances, but if used appropriately, debt can be a tool to help you build wealth. Debt is like fire. You can use it to keep yourself warm, cook food, and ward off animals—but if you don't know how to control it, it'll burn your house down.

The Danger of Debt

When you take out a loan, you take on an obligation to pay the money back, with interest, through a monthly payment. You will take this debt with you when you apply for auto loans or home loans, when you enter into a marriage, and so on. Effectively, you have committed your future income to the loan. While this can be a good idea with student loans, take on too many loans and your future self will be poor, no matter how much money you make. Worse, you'll be transferring more and more of your money to the bank through interest payments.

Compounding Interest

While compounding works to make you money when you are earning interest on savings or investments, it works against you when you are paying the interest on loans. To avoid compounding interest on loans, make sure your payments are at least enough to cover the interest charged each month. The good news is that the interest you are charged will be listed each month on the loan account statements you are sent by the bank or credit union, and fully amortized loans will always cover the interest costs plus enough principal to pay off what you owe by the end of the loan term.

The two most common loans on which people get stuck paying compounding interest are credit cards and student loans. Paying the minimum payment each month on a credit card will just barely cover the interest charged that month, while anything you buy with the credit card will begin to accrue interest on the day you make the purchase. Since credit cards charge interest daily, you'll begin paying interest on the interest immediately, starting the compound interest snowball working against you. When you get a credit card, always pay the credit card balance down to $0 each month to avoid the compound interest trap.

Getting and Using a Credit Card

One of the most controversial aspects of personal finance is the use of credit cards. While credit cards can be an incredibly useful tool, their high interest rates, combined with how easily credit cards can bury you in debt, make them extremely dangerous if not managed correctly.

Reflect on Elan from the chapter introduction and how they felt. How would you (or did you) feel to hold a new credit card with a $2,000 spending limit?

Benefits of a Credit Card

There are three main benefits of getting a credit card. The first is that credit cards offer a secure and convenient method of making purchases, similar to using a debit card. When you carry cash, you have the potential of having the money lost or stolen. A credit card or debit card, on the other hand, can be canceled and replaced at no cost to you.

Additionally, credit cards offer greater consumer protections than debit cards do when lost or stolen. These consumer protections are written into law, and with credit cards you have a maximum liability of $50. With a debit card, you are responsible for all charges made up until the point you report the card stolen. In order to have the same protections as with credit cards, you need to report the debit card lost or stolen within 48 hours. The longer you wait to report the loss of the card, or the longer it takes you to realize you lost your card, the more money in stolen charges you may be responsible for, up to an unlimited amount.[8]

The final benefit is that a credit card will allow you to build your credit score, which is helpful in many aspects of life. While most people associate a credit score with getting better rates on loans, credit scores are also important to getting a job, lowering car insurance rates, and finding an apartment.[9]

How to Use a Credit Card

All the benefits of credit cards are destroyed if you carry credit card debt. Credit cards should be used as a method of paying for things you can afford, meaning you should only use a credit card if the money is already sitting in your bank account and is budgeted for the item you are buying. If you use credit cards as a loan, you are losing the game.

Every month, you should pay off your credit card in full, meaning you will bring the loan amount down to $0. If your statement says you charged $432.56 that month, make sure you can pay off all $432.56. If you do this, you won't pay any interest on the credit card.

But what happens if you don't pay it off in full? If you are even one cent short on the payment, meaning you pay $432.55 instead, you must pay daily interest on the entire amount from the date you made the purchases. Your credit card company, of course, will be perfectly happy for you to make smaller payments—that's how they make money. It is not uncommon for people to pay twice as much as the amount purchased and take years to pay off a credit card when they only pay the minimum payment each month.

What to Look for in Your Initial Credit Card

1. Find a Low-Rate Credit Card

    Even though you plan to never pay interest, mistakes will happen, and you don't want to be paying high interest while you fix a misstep. Start by narrowing the hundreds of card options to the few with the lowest APR (annual percentage rate).

2. Avoid Cards with Annual Fees or Minimum Usage Requirements

    Your first credit card should ideally be one you can keep forever, but that's expensive to do if they charge you an annual fee or have other requirements just for having the card. There are many options that won't require you to spend a minimum amount each month and won't charge you an annual fee.

3. Keep the Credit Limit Equal to Two Weeks' Take-Home Pay

    Even though you want to pay your credit card off in full, most people will max out their credit cards once or twice while they are building their good financial habits. If this happens to you, having a small credit limit makes that mistake a small mistake instead of a $5,000 mistake.

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8   Federal Trade Commission. "Lost Or Stolen Credit, ATM, and Debit Cards." 2012.
9   Purposeful Finance. "Four Surprising Ways Your Credit Score Will Affect Your Life." https://www.purposefulfinance.org/home/Articles/2016/four-surprising-ways-your-credit-score-will-affect-your-life

4. Avoid Rewards Cards

   Everyone loves to talk about rewards cards, but credit card companies wouldn't offer rewards if they didn't earn them a profit. Rewards systems with credit cards are designed by experts to get you to spend more money and pay more interest than you otherwise would. Until you build a strong habit of paying off your card in full each month, don't step into their trap.

What Is a Good Credit Score?

Most credit scores have a 300–850 score range. The higher the score, the lower the risk to lenders. A "good" credit score is considered to be in the 670–739 score range.

Credit Score Ranges	Rating	Description
< 580	Poor	This credit score is well below the average score of US consumers and demonstrates to lenders that the borrower may be a risk.
580-669	Fair	This credit score is below the average score of US consumers, though many lenders will approve loans with this score.
670-739	Good	This credit score is near or slightly above the average of US consumers, and most lenders consider this a good score.
740-799	Very Good	This credit score is above the average of US consumers and demonstrates to lenders that the borrower is very dependable.
800+	Exceptional	This credit score is well above the average score of US consumers and clearly demonstrates to lenders that the borrower is an exceptionally low risk.

Table 7.6

Components of a Credit Score and How to Improve Your Credit

Credit scores contain a total of five components. These components are credit payment history (35 percent), credit utilization (30 percent), length of credit history (15 percent), new credit (10 percent), and credit mix (10 percent). The main action you can take to improve your credit score is to stop charging and pay all bills on time. Even if you cannot pay the full amount of the credit card balance, which is the best practice, pay the minimum on time. Paying more is better for your debt load but does not improve your score. Carrying a balance on a credit card does not improve your score. Your score will go down if you pay bills late and owe more than 30 percent of your credit available. Your credit score is a reflection of your willingness and ability to do what you say you will do—pay your debts on time.

7.4 | Paying for College

Estimated completion time: 35 minutes.

Questions to Consider:

• What choices should you consider when taking on student debt?

- How do you match debt to postgraduate income?
- What types of financial aid are available?
- How do you apply for financial aid?
- What are the best repayment strategies?

"An investment in knowledge always pays the best interest."

—Benjamin Franklin, *The Way to Wealth*: Ben Franklin on Money and Success

As you progress through your college experience, the cost of college can add up rapidly. Worse, your anxiety about the cost of college may rise faster as you hear about the rising costs of college and the horror stories regarding the "student loan crisis." It is important to remember that *you* are in control of your choices and the cost of your college experience, and you do not have to be a sad statistic.

Education Choices

Education is vital to living. Education starts at the beginning of our life, and as we grow, we learn language, sharing, and to look both ways before crossing the street. We also generally pursue a secular or public education that often ends at high school graduation. After that, we have many choices, including getting a job and stopping our education, working at a trade or business started by our parents and bypassing additional schooling, earning a certificate from a community college or four-year college or university, earning a two-year or associate degree from one of the same schools, and completing a bachelor's or advanced degree at a college or university. We can choose to attend a public or private school. We can live at home or on a campus.

Each of these choices impacts our debt, happiness, and earning power. The average income goes up with an increase in education, but that is not an absolute rule. The New York Federal Reserve Bank reported in 2017 that approximately 34 percent of college graduates worked in a job that did not require a college degree[10]. Of course, many well-paying occupations do require a bachelor's or master's degree. You have started on a path that may be perfect for you, but you may also choose to make adjustments.

College success from a financial perspective means that you must:

- Know the total cost of the education
- Consider job market trends
- Work hard at school during the education
- Pursue ways to reduce costs

Most importantly: Buy only the amount of education that returns more than you invest.

According to *US News & World Report*, the average cost of college (including university) tuition and fees varies widely. In-state colleges average $10,338 while out-of-state students pay $22,698 for the same state college. Private colleges average $38,185 . The local community college averages approximately $3,726. On-campus housing and meals, if available, can add approximately $10,000 per year.[11] See the table below, and create your own chart after you research.

10   Cooper. P. (2017). "New York Fed highlights underemployment among college graduates." https://www.forbes.com/sites/prestoncooper2/2017/07/13/new-york-fed-highlights-underemployment-among-college-graduates/#55be172f40d8
11   Kerr, E. and Wood, S. (2019). "The cost of private versus public colleges." US News and World Reports. https://www.usnews.com/education/best-colleges/paying-for-college/articles/2019-06-25/the-cost-of-private-vs-public-colleges

Sample College Costs

Type of School	Annual Tuition without Housing	Tuition If Living on Campus	Total Cost at Planned Completion
Community College (2 yr.)	$3,726	Live at Home	$7,452
Public University, In State (4 yr.)	$9,716	Live at Home	$38,864
Public University, In State (4 yr.)		$19,716	$78,864
Public University, Out of State (4 yr.)	$21,629	$31,629	$126,516
Private College (4 yr.)	$35,676	$45,676	$182,704

Table 7.7

You may need to adjust your college plan as circumstances change for you and in the job market. You can modify plans based on funding opportunities available to you (see next sections) and your location. You may prefer a community-college-only education, or you may complete two years at a community college and then transfer to a university to complete a bachelor's degree. Living at home for the first two years or all of your college education will save a lot of money if your circumstances allow. Be creative!

Key to Success: Matching Student Debt to Post-Graduation Income

Students and parents often ask, "How much debt should I have?" The problem is that the correct answer depends on your personal situation. A big-firm attorney in a major city might make $120,000 in their first year as a lawyer. Having $100,000 or even $200,000 in student debt in this situation may be reasonable. But a high school teacher making $40,000 in their first year would never be able to pay off the debt.

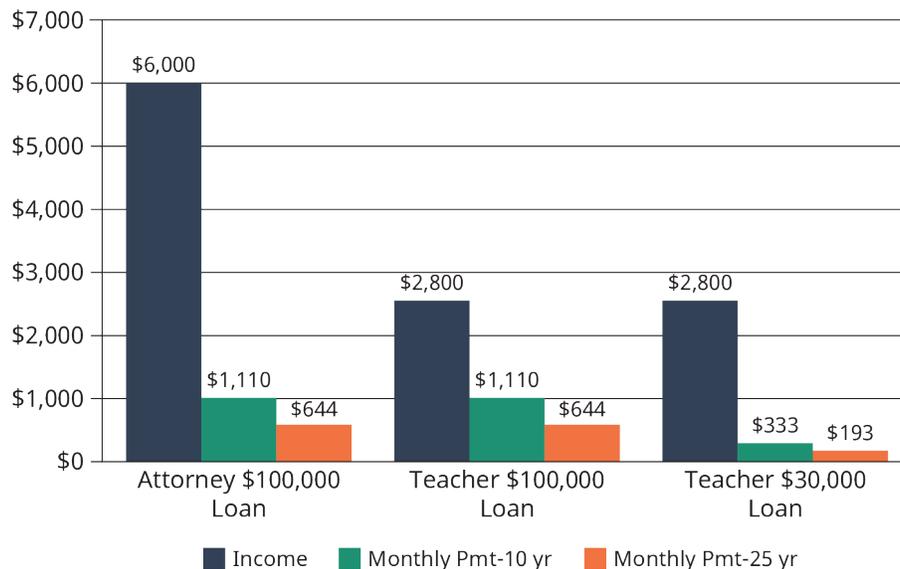The amount of student debt you take on should be tied to the income you expect.

Figure 7.5 Each field of employment brings with it an average income and assumed debt. This graph shows the impact of an

attorney's income versus debt, and then compares a teacher who took a $100,000 loan with one who took a $30,000 loan. Note the teacher's income is the same in both cases. (Credit: Based on information from National Association of Colleges and Employers and US Bureau of Labor Statistics.)

Research Your Starting Salary

Begin by researching your expected starting salary when you graduate. Most students expect to make significantly more than they will actually make.[12] As a result, your salary expectations are likely much higher than reality. Ask professors at your college what is typical for a recent graduate in your field, or do informational interviews with human resource managers at local companies. Explore the US Bureau of Labor Statistics' Occupational Outlook Handbook (https://openstax.org/l/OOH). Another handy tool that gives general information based on your personal experience and location is the PayScale (https://openstax.org/l/salariesbyoccupation). Search websites and talk to employees of companies that interest you for future employment to identify real starting salaries.

Undergraduate Degree: 1 x Annual Salary

For students working toward a bachelor's or associate degree, or both forms of undergraduate degrees, you should try to keep your student loans equal to or less than your expected first year's salary. So if, based on research, you expect to make $40,000 in your first year out of college, then $33,000 in student loans would be a reasonable amount for you to pay out of a monthly budget with some sacrifice.

Advanced Degrees: 1–2 x Annual Salary

Once you've graduated with your bachelor's degree, you may want to get an advanced degree such as a master's degree, a law degree, a medical degree, or a doctorate. While these degrees can greatly increase your income, you still need to match your student debt to your expected income. Advanced degrees can often double your expected annual salary, meaning your total debt for all your degrees should be equal to or less than twice your expected first job income. A lower number for the debt portion of your education would be more manageable.

Your goal should be to pay for college using multiple methods so your student loan debt can be as small as possible, rather than just making low monthly payments on a large loan that will lead to a higher overall cost.

Types of Financial Aid: How to Pay for College

The true cost of college may be more than you expected, but you can make an effort to make the cost less than many might think. While the price tag for a school might say $40,000, the net cost of college may be significantly less. The net price for a college is the true cost a family will pay when grants, scholarships, and education tax benefits are factored in. The net cost for the average family at a public in-state school is only $3,980. And for a private school, free financial aid money reduces the cost to the average family from $32,410 per year to just $14,890.

If you haven't visited your college's financial aid office recently, it's probably worth it to talk with them. You must seek out opportunities, complete paperwork, and learn about then meet the specific criteria, but it can save you thousands of dollars.

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12   Hess, Abigail. "College Grades expect to earn $60,000." 2019. CNBC. https://www.cnbc.com/2019/02/15/college-grads-expect-to-earn-60000-in-their-first-jobfew-do.html

Type of College	Average Published Yearly Tuition and Fees
Public Two-Year College (in-district students)	$3,900
Public Four-Year College (in-state students)	$9,400
Private Four-Year College	$37,600

Table 7.8 Source: National Center for Education Statistics (https://nces.ed.gov/fastfacts/display.asp?id=76)

Grants and Scholarships

Grants and scholarships are free money you can use to pay for college. Unlike loans, you never have to pay back a grant or a scholarship. All you have to do is go to school. And you don't have to be a straight-A student to get grants and scholarships. There is so much free money, in fact, that billions of dollars go unclaimed every year.[13]

While some grants and scholarships are based on a student's academic record, many are given to average students based on their major, ethnic background, gender, religion, or other factors. There are likely dozens or hundreds of scholarships and grants available to you personally if you look for them.

Federal Grants

Federal Pell Grants are awarded to students based on financial need, although there is no income or wealth limit on the grant program. The Pell Grant can give you more than $6,000 per year in free money toward tuition, fees, and living expenses.[14] If you qualify for a Pell Grant based on your financial need, you will automatically get the money.

Federal Supplemental Educational Opportunity Grants (FSEOGs) are additional free money available to students with financial need. Through the FSEOG program, you can receive up to an additional $4,000 in free money. These grants are distributed through your school's financial aid department on a first-come, first-served basis, so pay close attention to deadlines.

Teacher Education Assistance for College and Higher Education (TEACH) Grants are designed to help students who plan to go into the teaching profession. You can receive up to $4,000 per year through the TEACH Grant. To be eligible for a TEACH Grant, you must take specific classes and majors and must hold a qualifying teaching job for at least four years after graduation. If you do not fulfill these obligations, your TEACH Grant will be converted to a loan, which you will have to pay back with both interest and back interest.

There are numerous other grants available through individual states, employers, colleges, and private organizations.

State Grants

Most states also have grant programs for their residents, often based on financial need. Eleven states have even implemented free college tuition programs for residents who plan to continue to live in the state. Even some medical schools are beginning to be tuition free. Check your school's financial aid office and your state's department of education for details.

College/University Grants and Scholarships

Most colleges and universities have their own scholarships and grants. These are distributed through a wide variety of sources, including the school's financial aid office, the school's endowment fund, individual

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13 https://www.usatoday.com/story/college/2015/01/20/29-billion-unused-federal-grant-awards-in-last-academic-year/37399897/
14 https://studentaid.ed.gov/sa/types/grants-scholarships/pell

departments, and clubs on campus.

Private Organization Grants and Scholarships

A wide variety of grants and scholarships are awarded by foundations, civic groups, companies, religious groups, professional organizations, and charities. Most are small awards under $4,000, but multiple awards can add up to large amounts of money each year. Your financial aid office can help you find these opportunities.

Employer Grants and Scholarships

Many employers also offer free money to help employees go to school. A common work benefit is a tuition reimbursement program, where employers will pay students extra money to cover the cost of tuition once they've earned a passing grade in a college class. And some companies are going even further, offering to pay 100 percent of college costs for employees. Check to see whether your employer offers any kind of educational support.

Figure 7.6 Employers in certain fields, such as healthcare, may offer their own grants and scholarships. (Credit: Ano Lobb / Flickr / Attribution 2.0 Generic (CC-BY 2.0))

Additional Federal Support

The federal government offers a handful of additional options for college students to find financial support.

Education Tax Credits

The IRS gives out free money to students and their parents through two tax credits, although you will have to choose between them. The American opportunity tax credit (AOTC) will refund up to $2,500 of qualifying education expenses per eligible student, while the lifetime learning credit (LLC) refunds up to $2,000 per year regardless of the number of qualifying students.

While the AOTC may be a better tax credit to choose for some, it can only be claimed for four years for each student, and it has other limitations. The LLC has fewer limitations, and there is no limit on the number of years you can claim it. Lifetime learners and nontraditional students may consider the LLC a better choice. Calculate the benefits for your situation.

The IRS warns taxpayers to be careful when claiming the credits. There are potential penalties for incorrectly claiming the credits, and you or your family should consult a tax professional or financial adviser when claiming these credits.

Federal Work-Study Program

The Federal Work-Study Program provides part-time jobs through colleges and universities to students who

are enrolled in the school. The program offers students the opportunity to work in their field, for their school, or for a nonprofit or civic organization to help pay for the cost of college. If your school participates in the program, it will be offered through your school's financial aid office.

Student Loans

Federal student loans are offered through the US Department of Education and are designed to give easy and inexpensive access to loans for school. You don't have to make payments on the loans while you are in school, and the interest on the loans is tax deductible for most people. Direct Loans, also called Federal Stafford Loans, have a competitive fixed interest rate and don't require a credit check or cosigner.

Direct Subsidized Loans

Direct Subsidized Loans are federal student loans on which the government pays the interest while you are in school. Direct Subsidized Loans are made based on financial need as calculated from the information you provide in your application. Qualifying students can get up to $3,500 in subsidized loans in their first year, $4,500 in their second year, and $5,500 in later years of their college education.

Direct Unsubsidized Loans

Direct Unsubsidized Loans are federal loans on which you are charged interest while you are in school. If you don't make interest payments while in school, the interest will be added to the loan amount each year and will result in a larger student loan balance when you graduate. The amount you can borrow each year depends on numerous factors, with a maximum of $12,500 annually for undergraduates and $20,500 annually for professional or graduate students.

There are also total loan limits that apply to put a maximum cap on the total amount you can borrow for student loans.

Direct PLUS Loans

Direct PLUS Loans are additional loans a parent, grandparent, or graduate student can take out to help pay for additional costs of college. PLUS loans require a credit check and have higher interest rates, but the interest is still tax deductible. The maximum PLUS loan you can receive is the remaining cost of attending the school.

Parents and other family members should be careful when taking out PLUS loans on behalf of a child. Whoever is on the loan is responsible for the loan forever, and the loan generally cannot be forgiven in bankruptcy. The government can also take Social Security benefits should the loan not be repaid.

Private Loans

Private loans are also available for students who need them from banks, credit unions, private investors, and even predatory lenders. But with *all* the other resources for paying for college, a private loan is generally unnecessary and unwise. Private loans will require a credit check and potentially a cosigner, they will likely have higher interest rates, and the interest is not tax deductible. As a general rule, you should be wary of private student loans or avoid them altogether.

Repayment Strategies

Payments on student loans will begin shortly after you graduate. While many websites, financial "gurus," and talking heads in the media will encourage you to pay off your student loans as quickly as possible, you should give careful consideration to your repayment options and how they may impact your financial plans. Quickly paying off your student loans or refinancing your student loans into a private loan may be the worst option available to you.

Payment Plans

The federal government has eight separate loan repayment programs, each with their own way of calculating

the payment you owe. Five of the programs tie loan payments to your income, which can make it easier to afford your student loans when you are just starting off in your career. The programs are described briefly below, but you should seek the help of a licensed fiduciary financial adviser familiar with student loans when making decisions related to student loan payment plans.

The standard repayment plan sets a consistent monthly payment to pay off your loan within 10 years (or up to 30 years for consolidated loans). You can also choose a graduated repayment plan, which will begin with lower payments and then increase the payment every two years. The graduated plan is also designed to pay off your student loans in 10 years (or up to 30 years for consolidated loans). A third option is the extended repayment plan, which provides a fixed or graduated payment for up to 25 years. However, none of these programs are ideal for individuals planning to seek loan forgiveness options, which are discussed below.

Beyond the "normal" repayment options, the government offers five income-based repayment options: (1) the Pay As You Earn (PAYE) repayment plan, (2) the Revised Pay As You Earn (REPAYE) repayment plan, (3) the Income-Based Repayment (IBR) plan, (4) the Income-Contingent Repayment (ICR) plan, and (5) the Income-Sensitive Repayment (ISR) plan. Each program has its method of calculating payments, along with specific requirements for eligibility and rules for staying eligible in the program. Many income-based repayment plans are also eligible for loan forgiveness after a set period of time, assuming you follow all the rules and remain eligible.

Loan Forgiveness Programs

Many income-based repayment options also have a loan forgiveness feature built into the repayment plan. If you make 100 percent of your payments on time and follow all of the other plan rules, any remaining loan balance at the end of the plan repayment term (typically 20 to 30 years) will be forgiven. This means you will not have to pay the remainder on your student loans.

This loan forgiveness, however, comes with a catch: taxes. Any forgiven balance will be counted and taxed as income during that year. So if you have a $100,000 loan forgiven, you could be looking at an additional $20,000 tax bill that year (assuming you were in the 20 percent marginal tax rate).

Another option is the Public Service Loan Forgiveness (PSLF) program for students who go on to work for a nonprofit or government organization. If eligible, you can have your loans forgiven after working for 10 years in a qualifying public service job and making 120 on-time payments on your loans. A major advantage of PSLF is that the loan forgiveness may not be taxed as income in the year the loan is forgiven.

Consider Professional Advice

The complexity of the payment and forgiveness programs makes it difficult for non-experts to choose the best strategy to minimize costs. Additionally, the strict rules and potential tax implications create a minefield of potential financial problems. In 2017, the first year graduates were eligible for the PSLF program, 99 percent of applicants were denied due to misunderstanding the programs or having broken one of the many requirements for eligibility.[15]

Your Rights as a Loan Recipient

As a recipient of a federal student loan, you have the same rights and protections as you would for any other loan. This includes the right to know the terms and conditions for any loan before signing the paperwork. You also have the right to know information on your credit report and to dispute any loan or information on your credit file.

If you end up in collections, you also have several rights, even though you have missed loan payments. Debt collectors can only call you between 8 a.m. and 9 p.m. They also cannot harass you, threaten you, or call you at work once you've told them to stop. The United States doesn't have debtors' prisons, so anyone threatening

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15   https://www.forbes.com/sites/zackfriedman/2019/05/01/99-of-borrowers-rejected-again-for-student-loan-forgiveness/

you with arrest or jail time is automatically breaking the law.

Federal student loans also come with many other rights, including the right to put your loan in deferment or forbearance (pushing pause on making payments) under qualifying circumstances. Deferment or forbearance can be granted if you lose your job, go back to school, or have an economic hardship. If you have a life event that makes it difficult to make your payments, immediately contact the student loan servicing company on your loan statements to see if you can pause your student loan payments.

The Consumer Financial Protection Bureau (CFPB) has created a series of sample letters (https://openstax.org/l/debtcollectors) you can use to respond to a debt collector. You can also file a complaint (https://openstax.org/l/consumercomplaint) with the CFPB if you believe your rights have been violated.

Applying for Financial Aid, FAFSA, and Everything Else

The federal government offers a standard form called the Free Application for Federal Student Aid (FAFSA), which qualifies you for federal financial aid and also opens the door for nearly all other financial aid. Most grants and scholarships require you to fill out the FAFSA, and they base their decisions on the information in the application.

The FAFSA only requests financial aid for the specific year you file your application. This means you will need to file a FAFSA for each year you are in college. Since your financial needs will change over time, you may qualify for financial aid even if you did not qualify before.

You can apply for the FAFSA through your college's financial aid office or at studentaid.gov (https://openstax.org/l/fafsa) if you don't have access to a financial aid office. Once you file a FAFSA, any college can gain access to the information (with your approval), so you can shop around for financial aid offers from colleges.

Maintaining Financial Aid

To maintain your financial aid throughout your college career, you need to make sure you meet the eligibility requirements for each year you are in school, not just the year of your initial application. The basic requirements include being a US citizen or eligible noncitizen, having a valid Social Security number, and registering for selective service if required. Undocumented residents may receive financial aid as well and should check with their school's financial aid office.

You also must make satisfactory academic progress, including meeting a minimum grade-point average, taking and completing a minimum number of classes, and making progress toward graduation or a certificate. Your school will have a policy for satisfactory academic progress, which you can get from the financial aid office.

What to Do with Extra Financial Aid Money

One expensive mistake that students make with financial aid money is spending the money on non-education expenses. Students often use financial aid, including student loans, to purchase clothing, take vacations, or dine out at restaurants. Nearly 3 percent spend student loan money on alcohol and drugs.[16] These non-education expenses are major contributors to student loan debt, which will make it harder for you to afford a home, take vacations, or save for your retirement after you graduate.

When you have extra student loan money, consider saving it for future education expenses. Just like you will need an emergency fund all your adult life, you will want an emergency fund for college when expensive books or travel abroad programs present unexpected costs. If you make it through your college years with extra money in your savings, you can use the money to help pay down debt.

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16 https://studentloanhero.com/featured/smart-dumb-money-moves-students/

ANALYSIS QUESTION

A closer look: How much student loan debt do you currently have, and how much do you think you'll have by the end of college? How could this debt impact your future?

📄 Summary

There are a lot of benefits to good financial management. Primarily, it generally allows you to do more of what you want with your life. When you have poor financial habits, too much of your money goes into other people's pockets. But when you have good financial management habits, you can afford to do more because you have worked hard, separated needs from wants, saved and invested, and avoided credit card and debt pitfalls.

However, financial literacy is a topic that many college students struggle with, but good financial planning habits will benefit you long after your college days are behind you. To make the most of what you have learned about financial literacy, specifically student debt and strategies for managing your finances in college, consider what else you would like to work on. Choose one of the following to explore further this term:

- Create a budget with your expenses and income. Look for ways to eliminate unnecessary spending and increase your ability to pay for your college expenses.
- Research college grants, scholarships, and loans and create a list of potential opportunities that you can take now and in the future to help you cover your costs while in college. Rank your options.
- Develop an emergency fund and guidelines for when to use it.
- Research the best credit card options for you at this time.

Figure 8.1 (Credit: University of the Fraser Valley / Flickr / Attribution 2.0 Generic (CC-BY 2.0))

Chapter Outline

8.1 Setting Goals and Staying Motivated
8.2 Planning Your Degree Path
8.3 Making a Plan
8.4 Using the Career Planning Cycle

✎ Introduction

Student Survey

How do you feel about your readiness to create an academic and life plan? These questions will help you determine how the chapter concepts relate to you right now. As you are introduced to new concepts and practices, it can be informative to reflect on how your understanding changes over time. Take this quick survey to figure it out, ranking questions on a scale of 1–4, 1 meaning "least like me" and 4 meaning "most like me."

1. I know why I want to go to college and what I want to accomplish.
2. I have set both short- and long-term academic goals.
3. I am familiar with the requirements I must complete and options I must select to obtain a college degree.
4. I am familiar with the resources, tools, and individuals who can assist me in developing an effective plan for success.

You can also take the Chapter 8 survey (https://openstax.org/l/collegeconcisesurvey08) anonymously online.

STUDENT PROFILE

"I came into my university with little to no knowledge about how to decide a college major. I can now say with confidence that I have found the major for me! This was not an easy process though. It takes a lot of reflection to decide where you will focus your time and energy for your college career. The most important

thing I had to consider was what major would provide me with learning outcomes that matter the most to me. I switched my major three or four times and each time I weighed the pros and cons of the major I was exiting and the one I was transitioning into. I decided to major in sociology and it has been the best decision of my academic career! I value social awareness and deep understandings of social phenomenon and sociology provided the course material necessary to place me on a path to begin learning about those topics. As a first-generation and low-income student, navigating college pathways can be difficult. That is why it is so important to be open to change and set on learning what you want, to learn how to get yourself to the next step!"

—**Drew Carter**, Rice University

About This Chapter

Among the most celebrated differences between high school and college is the freedom that students look forward to when they complete their mandatory high school education and take up the voluntary pursuit of a college degree. Though not every college freshman comes fresh from high school, those who do might be looking forward to the freedom of moving away from home onto a campus or into an apartment. Others might be excited about the potential to sleep in on a Monday morning and take their classes in the afternoon. For others, balancing a class schedule with an already-busy life filled with work and other responsibilities may make college seem less like freedom and more like obligation. In any case, and however they might imagine their next experience to be, students can anticipate increased freedom of choice in college and the ability to begin to piece together how their values, interests, and developing knowledge and skills will unfold into a career that meets their goals and dreams.

By the time you complete this chapter, you should be able to do the following:

- Learn to set short-term goals that build toward a long- term goal, and plan how you will track progress toward your goals.
- List the types of college certificates, degrees, special programs, and majors you can pursue, as well as general details about their related opportunities and requirements.
- Take advantage of resources to draft and track an academic plan.
- Recognize decision-making and planning as continuous processes, especially in response to unexpected change.

8.1 | Setting Goals and Staying Motivated

Estimated completion time: 11 minutes.

Questions to Consider:

- How do I set motivational goals?
- What are SMART goals?
- What's the importance of an action plan?
- How do I keep to my plan?

Motivation often means the difference between success and failure. That applies to school, to specific tasks, and to life in general. One of the most effective ways to keep motivated is to set goals.

Goals can be big or small. A goal can range from *I am going to write one extra page tonight*, to *I am going to work to get an A in this course*, all the way to *I am going to graduate in the top of my class so I can start my career with a really good position*. The great thing about goals is that they can include and influence a number

of other things that all work toward a much bigger picture. For example, if your goal is to get an A in a certain course, all the reading, studying, and every assignment you do for that course contributes to the larger goal. You have motivation to do each of those things and to do them well.

Setting goals is something that is frequently talked about, but it is often treated as something abstract. Like time management, goal setting is best done with careful thought and planning. This next section will explain how you can apply tested techniques to goal setting and what the benefits of each can be.

Set Goals That Motivate You

The first thing to know about goal setting is that a goal is a specific end result you desire. If the goal is not something you are really interested in, there is little motivational drive to achieve it. Think back to when you were much younger and some well-meaning adult set a goal for you—something that didn't really appeal to you at all. How motivated were you to achieve the goal? More than likely, if you were successful at all in meeting the goal, it was because you were motivated by earning the approval of someone or receiving a possible reward, or you were concerned with avoiding something adverse that might happen if you did not do what you were told. From an honest perspective in that situation, your real goal was based on something else, not the meeting of the goal set for you. To get the most from the goals you set, make sure they are things that you are interested in achieving.

That is not to say you shouldn't set goals that are supported by other motivations (e.g., If I finish studying by Friday, I can go out on Saturday), but the idea is to be intellectually honest with your goals.

Set SMART Goals

Goals should also be SMART. In this case, the word *smart* is not only a clever description of the type of goal, but it is also an acronym that stands for Specific, Measurable, Attainable, Relevant, and Time-bound. The reason these are all desirable traits for your goals is because they not only help you plan how to meet the goal, but they can also contribute to your decision-making processes during the planning stage.

What does it mean to create SMART goals?

- Specific—For a goal to be specific, it must be defined enough to actually determine the goal. A goal of *get a good job when I graduate* is too general. It doesn't define what a good job is. In fact, it doesn't even necessarily include a job in your chosen profession. A more specific goal would be something like *be hired as a nurse in a place of employment where it is enjoyable to work and that has room for promotion.*
- Measurable—The concept of *measurable* is one that is often overlooked when setting goals. What this means is that the goal should have clearly defined outcomes that are detailed enough to measure and can be used for planning of how you will achieve the goal. For example, setting a goal of *doing well in school* is a bit undefined, but making a goal of *graduating with a GPA above 3.0* is measurable and something you can work with. If your goal is measurable, you can know ahead of time how many points you will have to earn on a specific assignment to stay in that range or how many points you will need to make up in the next assignment if you do not do as well as you planned.
- Attainable—*Attainable* or *achievable* goals means they are reasonable and within your ability to accomplish. While a goal of *make an extra one million dollars by the end of the week* is something that would be nice to achieve, the odds that you could make that happen in a single week are not very realistic.
- Relevant—For goal setting, *relevant* means it applies to the situation. In relation to college, a goal of *getting a horse to ride* is not very relevant, but *getting dependable transportation* is something that would contribute to your success in school.
- Time-bound—Time-bound means you set a specific time frame to achieve the goal. *I will get my paper written by Wednesday* is time-bound. You know when you have to meet the goal. *I will get my paper written sometime soon* does not help you plan how and when you will accomplish the goal.

In the following table you can see some examples of goals that do and do not follow the SMART system. As you

read each one, think about what elements make them SMART or how you might change those that are not.

Goal	Is it SMART?	
I am going to be rich someday.	No	There is nothing really specific, measurable, or time-bound in this goal.
I will graduate with my degree, on time.	Yes	The statement calls out specific, measurable, and time-bound details. The other attributes of attainable and relevant are implied.
I am going to save enough money to buy a newer car by June.	Yes	All SMART attributes are covered in this goal.
I would like to do well in all my courses next semester.	No	While this is clearly time-bound and meets most of the SMART goal attributes, it is not specific or measurable without defining what "do well" means.
I am going to start being a nicer person.	No	While most of the SMART attributes are implied, there is nothing really measurable in this goal.
I will earn at least a 3.0 GPA in all my courses next semester.	Yes	All of the SMART attributes are present in this goal.
I am going to start being more organized.	No	While most of the SMART attributes are implied, there is nothing really measurable in this goal.

Table 8.1

Long-Term Goals

Once you have learned how to set goals that are specific and measurable, consider developing both long-term and short-term goals. Long-term goals are future goals that often take years to complete. An example of a long-term goal might be to complete a Bachelor of Arts degree within four years. Another example might be purchasing a home or running a marathon. While this chapter focuses on academic and career planning, long-term goals are not exclusive to these areas of your life. You might set long-term goals related to fitness, wellness, spirituality, and relationships, among many others. When you set a long-term goal in any aspect of your life, you are demonstrating a commitment to dedicate time and effort toward making progress in that area. Because of this commitment, it is important that your long-term goals are aligned with your values.

Short-Term Goals

Setting short-term goals helps you consider the necessary steps you'll need to take, but it also helps to chunk a larger effort into smaller, more manageable tasks. Even when your long-term goals are SMART, it's easier to stay focused and you'll become less overwhelmed in the process of completing short-term goals.

You might assume that short-term and long-term goals are different goals that vary in the length of time they take to complete. Given this assumption, you might give the example of a long-term goal of learning how to create an app and a short-term goal of remembering to pay your cell phone bill this weekend. These are valid

goals, but they don't exactly demonstrate the intention of short- and long-term goals for the purposes of effective planning.

Instead of just being bound by the difference of time, short-term goals are the action steps that take less time to complete than a long-term goal, but that help you work toward your long-term goals. To determine your best degree option, it might make sense to do some research to determine what kind of career you're most interested in pursuing. Or, if you recall that short-term goal of paying your cell phone bill this weekend, perhaps this short-term goal is related to a longer-term goal of learning how to better manage your budgeting and finances.

Setting Long- and Short-Term Goals

Consider this scenario: While meeting with an academic advisor at his college to discuss his change of major, Sunil was tasked with setting long- and short-term goals aligned with that major. He selected a degree plan in business administration, sharing with his advisor his intention to work in business and hopefully human relations in particular. His advisor discussed with him how he could set short-term goals that would help his progress on that plan. Sunil wondered if he should be as specific as setting short-term goals week by week or for the successful completion of every homework assignment or exam. His advisor shared that he could certainly break his goals down into that level of specificity if it helped him to stay focused, but recommended that he start by outlining how many credits or courses he would hope to complete. Sunil drafted his goals and planned to meet again with his advisor in another week to discuss.

My Goals – Sunil Shah	
Long-term	My goal is to graduate from my college in a total of 4 years with a degree in business administration, concentrating in human relations.
Short-term	• Finish the 12 credits i am taking in my first semester with at least a 3.0 GPA • Take 15 credits in the spring semester while maintaining my GPA • Take a 3 credit class online in the summer • Take 15 credits in my third semester • Apply for study abroad program in my third semester • Take 18 credits in my fourth semester • Complete study abroad program for business during my fifth semester (12 credits) • Apply for summer internship program during fifth semester • Take 15 credits in my sixth semester • Complete summer internship program • Take 15 credits in my seventh semester • Take 15 credits in my eighth semester • Graduate in four years and take my parents out for an awesome dinner to thank them for their support!

Figure 8.2 Sunil drafted his goals before meeting with his advisor to discuss them.

Sunil worried that his list of short-term goals looked more like a checklist of tasks than anything. His advisor reassured him, sharing that short-term goals can absolutely look like a checklist of tasks because their purpose is to break the long-term goal down into manageable chunks that are easier to focus on and complete. His advisor then recommended that Sunil add to his plan an additional note at the end of every other semester to "check in" with his advisor to make certain that he was on track.

Planning for Adjustments

You will recall from the SMART goals goal-setting model that goals should be both measurable and attainable.

Far too often, however, we set goals with the best of intentions but then fail to keep track of our progress or adjust our short-term goals if they're not helping us to progress as quickly as we'd like. When setting goals, the most successful planners also consider when they will evaluate their progress. At that time, perhaps after each short-term goal should have been met, they may reflect on the following:

1. **Am I meeting my short-term goals as planned?**
   - If so, celebrate!
   - If not, you may want to additionally consider:

2. **Are my short-term goals still planned across time in a way that they will meet my long-term goals?**
   - If so, continue on your path.
     If not, reconsider the steps you need to take to meet your long-term goal. If you've gotten off track or if you've learned that other steps must be taken, set new short-term goals with timelines appropriate to each step. You may also want to seek some additional advice from others who have successfully met long-term goals that are similar to your own.

3. **Are my long-term goals still relevant, or have my values changed since I set my goals?**
   - If your goals are still relevant to your interests and values, then continue on your path, seeking advice and support as needed to stay on track.
   - If your goals are no longer relevant or aligned with your values, give careful consideration to setting new goals.

While departing from your original goals may seem like a failure, taking the time to reflect on goals before you set them aside to develop new ones is a success. Pivoting from one goal to new, better-fitting goal involves increased self-awareness and increased knowledge about the processes surrounding your specific goal (such as the details of a college transfer, for example). With careful reflection and information seeking, your change in plans may even demonstrate learning and increased maturity!

> ## APPLICATION ✅
>
> Take a moment to practice setting long- and short-term goals. Your short-term goal should help you progress toward your long-term goal. Include a plan for when and how you will know if you're on track or if you need to adjust your goals to match new priorities.

My Long-Term Goal:

My Short-Term Goal:

My Plan for Checking My Progress:

Keep in mind that values and goals may change over time as you meet new people, your life circumstances change, and you gain more wisdom or self-awareness. In addition to setting goals and tracking your progress, you should also periodically reflect on your goals to ensure their consistency with your values.

1 **Increase Personal Responsibility** — Adopt the mindset that *you* are the only person responsible for your goals. Hindrances and roadblocks may appear along the way, but you are responsible for navigating around them and overcoming them. Take control of the journey! Issues are not other people's problems. They are for you to solve.

2 **Reward Yourself for Completing the Task** — We are all motivated by rewards. Use this to your advantage and give yourself rewards for a job well done.

3 **Make Certain They Are *Your* Goals** — Again, your motivation level is not as high if the end result is not something you want to achieve.

4 **Visualize the Results** — Keeping in mind the benefits and visualizing the end results of each goal is extremely effective in keeping motivated.

5 **Break the Goal Down into Manageable Tasks** — As with any task, accomplishing the whole is easier when each part is tackled individually.

6 **Tap into Other People's Energy** — Surround yourself with other people that are motivated. As humans, we are social creatures, which means our moods and emotions can be influenced by others. If you are around other positive people that all work toward achieving their own goals, their energy can become infectious.

7 **Remind Yourself Why You Set the Goal** — This last item is of the utmost importance, especially for long term goals. Sometimes it is too easy to become mired in the drudgery of a difficult task and forget why you are doing something in the first place. Reminding yourself of the end goal helps reinforce everything you do that works toward your goal.

Figure 8.3 These seven ways to stay motivated are good suggestions from highly successful people. What other strategies would you suggest?

Planning Your Degree Path

Estimated completion time: 32 minutes.

Questions to Consider:

- What types of college degrees or certifications can I pursue?
- What is the difference between majors and minors?
- How do preprofessional programs differ from other majors?
- Do some majors have special requirements beyond regular coursework?

To set goals for your academic and career path, you must first have an understanding of the options available for you to pursue and the requirements you will need to meet. The next section provides an overview of academic programs and college degrees that are common among many colleges and universities in the United States. Please note that each institution will have its own specific options and requirements, so the intention of this section is both to help you understand your opportunities and to familiarize you with language that colleges typically use to describe these opportunities. After reviewing this section, you should be better able to formulate specific questions to ask at your school or be better prepared to navigate and search your own college's website.

Types of Degrees

Whereas in most states high school attendance through the 12th grade is mandatory, or *compulsory*, a college degree may be pursued voluntarily. There are fields that do not require a degree. Bookkeeping, computer repair, massage therapy, and childcare are all fields where certification programs—tracks to study a specific subject or career without need of a complete degree—may be enough.

However, many individuals will find that an associate or bachelor's degree is a requirement to enter their desired career field. According to United States Census data published in 2017, more than one-third of the adult population in the country has completed at least a bachelor's degree, so this may be the degree that is most familiar to you.
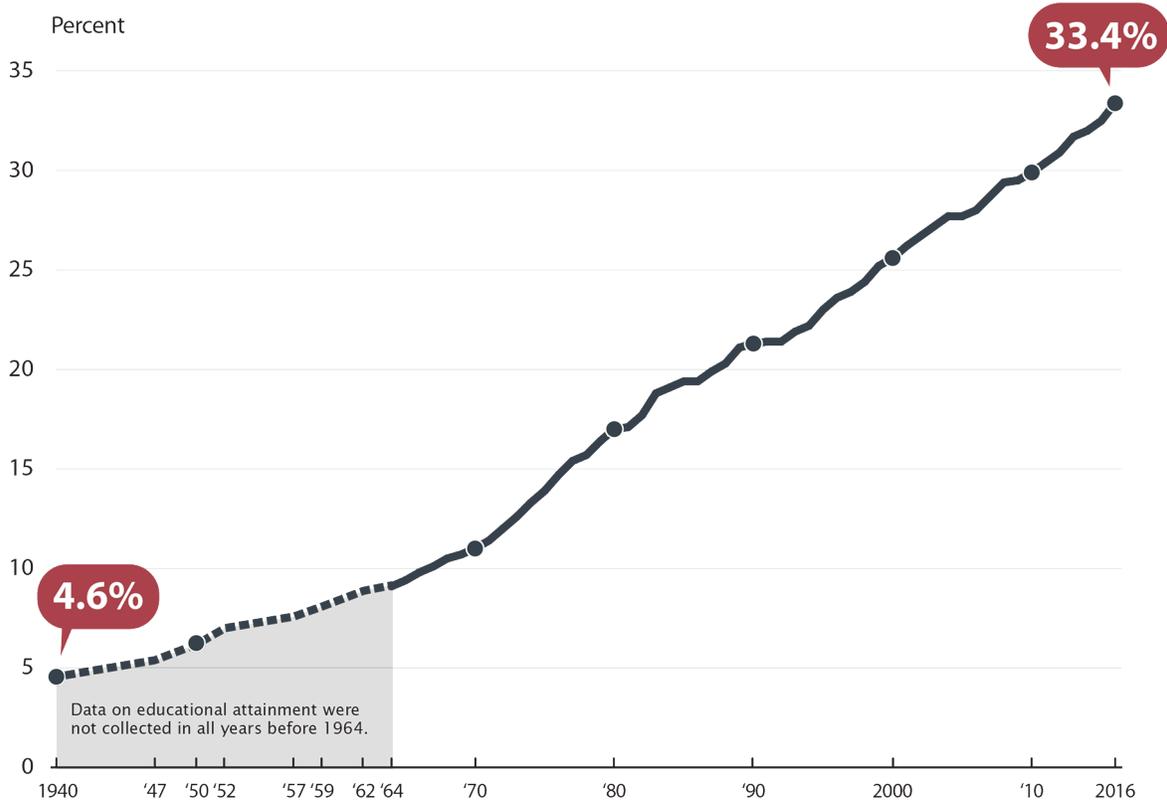
Figure 8.4 The number of American's receiving Bachelor's degrees has increased significantly. While not every job requires one, the level of overall education required for most careers continues to go up. (Credit: US Department of Commerce / Public Domain)

Not every job requires a bachelor's degree, and some require even higher degrees or additional specialized certifications. As you develop your academic plan, it is important to research your field of interest to see what requirements might be necessary or most desirable.

Require Associate Degrees	Require Bachelor's Degrees	Require Additional Certifications	Require Graduate Degrees
Radiology Technician	Nurse	Public School Teacher	Lawyer
Dental Hygienist	Computer/Information Systems Manager	Accountant	College or University Professor
Web Developer	Airline Pilot	Financial Advisor	Pharmacist
Graphic Designer	Electrical Engineer		Marriage and Family Therapist
Automotive Technician	Construction Manager		Occupational Therapist

Table 8.2 Example Jobs by Minimum Degree Qualification[1]

To distinguish between the types of degrees, it is useful to understand that courses are often assigned a number of credits, sometimes called *semester hours* as well. Credits relate to the calculated hours during a course that a student spends interacting with the instructor and/or the course material through class time, laboratory time, online discussions, homework, etc. Courses at all degree levels are typically assigned a value of one to six credits, although students often need to complete a developmental education course or two, often in English or math. These requirements, which cost as much as typical college courses but do not grant college credit, are meant to provide some basic information students may have missed in high school but that will be necessary to keep up in college-level coursework.

The minimum or maximum number of credits required to graduate with different degrees varies by state or institution, but approximate minimum numbers of credits are explained below. Keep in mind that although a minimum number of credits must be completed to get a certain degree, total credits completed is not the only consideration for graduation—you must take your credits or courses in particular subjects indicated by your college.

To determine your best degree option, it might make sense to do some research to determine what kind of career you're most interested in pursuing. Visit your campus career center or guidance office to meet with a counselor to guide you through this process. These services are free to students while they are enrolled in school, but can be pricey if used outside a school setting, so take advantage. There are other tools online you can investigate.

GET CONNECTED

These free, online self-assessments help you narrow down your choices.

- MyPlan (https://openstax.org/l/valuesassessment) identifies your motivations by having you rank different aspects of work, then creating a ranked list of different possible jobs.
- MAPP Test (https://openstax.org/l/MAPPassessment) helps you determine what you love to do and what you don't love to do and then creates a list of jobs that might be a good fit for you.

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1   Minimum degree qualifications may vary by state.

- [The Career Cluster Interest Survey (https://openstax.org/l/clustersurvey)](https://openstax.org/l/clustersurvey) is a quick tool to let you create career clusters based on personal qualities and school subjects and activities you especially enjoy.

Associate Degrees

To enter an associate degree program, students must have a high school diploma or its equivalent. Associate degree programs may be intended to help students enter a technical career field, such as automotive technology, graphic design, or entry-level nursing in some states. Such technical programs may be considered an Associate of Applied Arts (AAA) or Associate of Applied Science (AAS) degrees, though there are other titles as well.

Other associate degree programs are intended to prepare a student with the necessary coursework to transfer into a bachelor's degree program upon graduation. These transfer-focused programs usually require similar general education and foundational courses that a student would need in the first half of a bachelor's degree program. Transfer-focused associate degrees may be called Associate of Arts (AA) or Associate of Science (AS), or other titles, depending on the focus of study.

Figure 8.5 Air traffic controllers are extremely important and well-paid jobs that typically require an associate degree. (Credit: Expert Infantry / Flickr / Attribution 2.0 Generic (CC-BY 2.0))

An associate degree is typically awarded when a student has completed a minimum of 60 credits, approximately 20 courses, meeting the requirements of a specific degree. Some technical associate degrees, such as nursing, may require additional credits in order to meet requirements for special certifications. You may find that your college or university does not offer associate degrees. Most associate degrees are offered by community or junior colleges, or by career and technical colleges.

ACTIVITY

What to Ask

If you're planning your associate degree, here are some specific questions you may want to research.

If you intend to enter a technical career that requires special certification:

- Does the college prepare you to take a certification exam, or will you be meeting those requirements through offered courses?

- Does the college have any special internship or employment placement arrangements with employers to help you gain experience or get started in the field?

If you intend to transfer upon graduation:

- Is the college regionally accredited?
- Does the college have any special transfer agreements for guaranteed transfer of credits or perhaps for discounted tuition?
- Does your state have special transfer agreements or requirements that make it easier to transfer to colleges or universities within the same state?

Bachelor's Degrees

When someone generally mentions "a college degree," they are often referring to the bachelor's degree, or baccalaureate degree. Because it takes four years of full-time attendance to complete a bachelor's degree, this degree is also referred to as a "four-year degree." Similar to an associate degree, to enter a bachelor's degree program a student must have completed a high school diploma or its equivalent. Both associate degrees and bachelor's degrees are considered *undergraduate degrees*, thus students working toward these degrees are often called *undergraduates*. A student with an associate degree may transfer that degree to meet some (usually half) of the requirements of a bachelor's degree; however, completion of an associate degree is not necessary for entry into a bachelor's degree program.

A bachelor's degree is usually completed with a minimum of 120 credits, or approximately 40 courses. Some specialized degree programs may require more credits. (If an associate degree has been transferred, the number of credits from that degree usually counts toward the 120 credits. For example, if an associate degree was 60 credits, then a student must take 60 additional credits to achieve their bachelor's degree.)

Bachelor of Arts (BA), Bachelor of Science (BS), Bachelor of Science in Nursing (BSN), and Bachelor of Fine Arts (BFA) are the most popular degree titles at this level and differ primarily in their focus on exploring a broader range of subject areas, as with a BA, versus focusing in more depth on a particular subject, as with a BS, BSN, or BFA. Regardless of whether a student is pursuing a BA, BS, BSN, or BFA, each of these programs requires a balance of credits or courses in different subject areas. In the United States, a bachelor's degree comprises courses from three categories: *general education* courses, *major* courses, and *electives.* A fourth category of courses would be those required for a minor, which we will discuss in more detail in the section on majors and minors.

General Education

General education, also called *core curriculum*, is a group of courses that are often set as requirements by your state or by your individual college. These courses provide you with a foundation of knowledge across a breadth of fields and are also intended to help you further develop college-level critical-thinking and problem-solving abilities. You may be able to select courses from a general education menu of courses available at your institution. More than half of your bachelor's degree program is likely made up of general education courses.

English composition
Humanities courses that study our beliefs and the expression of our beliefs such as literature, philosophy, politics, art, or religious studies
Social science courses that study our behavior such as psychology, sociology, anthropology, or economics

Table 8.3 General Education Categories. While your college may use different labels, general education courses often include a selection of courses from these categories.

Laboratory science courses such as biology, chemistry, physics, and environmental science
Mathematics
Technology or computer skills
Foreign language, diversity, or global studies courses that provide introduction to different cultures or global social issues and promote cultural awareness
College success or first-year experience courses that provide introduction to your specific institution, discuss college-level expectations and skills, and/or provide assistance with academic and career planning

Table 8.3 General Education Categories. While your college may use different labels, general education courses often include a selection of courses from these categories.

Major Courses

Major courses are courses in your field of interest and provide you with the foundational knowledge required for further study in that field or with the skills necessary to enter your career. Some schools may refer to these as *career studies* courses. Major courses often have a series of *prerequisites*, or courses that must be taken in sequence prior to other courses, starting with an introductory course and progressing into more depth. Major courses usually make up about a fourth or more of a bachelor's degree (30 credits, or approximately 10 courses). A BS or BFA degree may require more major courses than a BA degree. Colleges and universities usually require students to select a major by the time they've completed 30 total credits.

Electives

Electives are free-choice courses. Though you may have a choice to select from a menu of options to meet general education and major requirements, electives are even less restricted. Some students may be able to take more electives than others due to their choice of major or if they are able to take courses that meet more than one requirement (for example, a sociology course may be both a major requirement and a general education social science course). Some colleges intentionally allow room for electives in a program to ensure that students, particularly those students who are undecided about their major, are able to explore different programs without exceeding the total number of credits required to graduate with a bachelor's degree. In other cases, students may have taken all of their major courses and fulfilled their general education requirements but still need additional credits to fulfill the minimum to graduate. The additional courses taken to meet the total credit requirement (if necessary) are considered electives.

Graduate Degrees

According to United States Census data published in 2018, 13.1 percent of the U.S. adult population have completed advanced degrees.[2] Whereas associate and bachelor's degrees are considered undergraduate degrees and require high school graduation for entry, advanced degrees called graduate degrees require prior completion of a bachelor's degree. Some professions require graduate degrees as a minimum job qualification, such as pharmacists, lawyers, physical therapists, psychologists, and college professors. In other cases, students may be motivated to pursue a graduate degree to obtain a higher-level job or higher salary, or to be more competitive in their field. Some students are also interested in learning about some subject in greater depth than they did at the undergraduate level. Because graduate degrees do not include general education or free elective courses, they are very focused on career-specific knowledge and skills. Graduate degrees include master's, doctoral, and professional degrees. *Master's degrees* often require 30–60 credits and take one to two years of full-time attendance to complete. Some master's degrees, like those for counselors, require supervised job experience as a component of the degree and therefore require more credits.
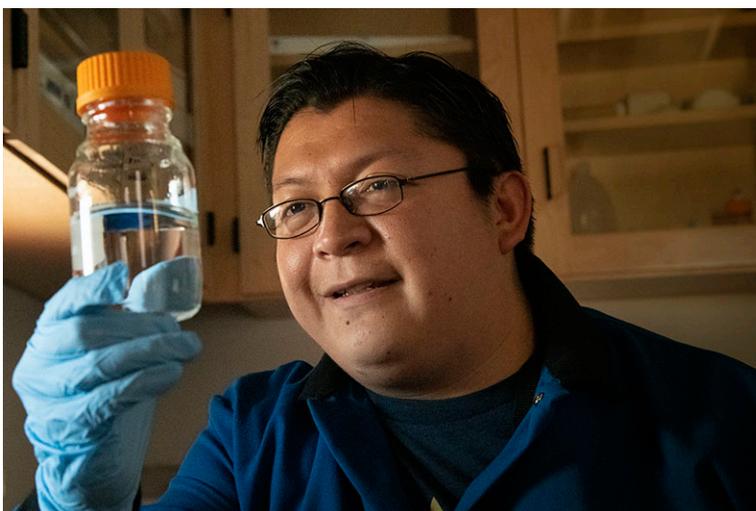
Figure 8.6 Pharmacists and related scientific or medical careers require graduate degrees. (Credit: US Department of Agriculture / Flickr / Public Domain)

Doctorate and professional degrees are the highest level of advanced degrees. Approximately 3.5% of the U.S. adult population has completed a doctorate or professional degree. Very few careers require this level of education for entry, so fewer individuals pursue these degrees. Doctorates are offered in many subjects and primarily prepare students to become researchers in their field of study. This in-depth level of education often requires an additional 90–120 credits beyond the bachelor's degree, and may or may not require a master's degree prior to entry. (A master's degree as an entry requirement may reduce the number of credits required to complete the doctoral degree.)

Professional degrees are a specific type of doctorate-level degree that focus on skills to be applied in a *practical*, or hands-on, career rather than as a researcher. The most common professional degrees are Doctor of Medicine (MD) for aspiring medical doctors, Juris Doctor (JD) for aspiring lawyers, Doctor of Pharmacy (PharmD) for aspiring pharmacists, and Doctor of Education (EdD) for aspiring school and college or university administrators. If the career you are pursuing requires a graduate degree, you should keep this end goal in mind as you plan for the timeline and finances required to meet your goals. You may also want to inquire about special agreements that your college or university may have to expedite admission into or completion of graduate degrees. For example, some universities offer *4+1 master's programs*, wherein students take both bachelor's and master's level courses during their last year as an undergraduate to accelerate the completion of both degrees.

Majors and Minors

One of the most common questions an undergraduate college student will be asked is "What's your major?" As we already noted, your major is only one part of your undergraduate (associate or bachelor's) degree, but it is the part that most demonstrates your interests and possible future goals. At some point during your studies, you will be asked to decide on, or *declare*, a major. You may also be able to select a *minor* or additional concentration. Whereas a major comprises approximately 10–12 courses of a bachelor's degree program and is required, a minor is usually 5–8 courses, is often optional, and may count toward or contribute to exceeding the total number of credits required for graduation. Rather than take elective courses, some students will select courses that meet the requirements for a minor. When selecting a major and possibly a minor, you'll want to consider how the knowledge and skills you gain through those fields of study prepare you for a particular career. Majors and minors can be complementary. For example, a major in business might be well-matched with a minor in a foreign language, thus allowing the student to pursue a career in business with a

2   United States Census Bureau. (2019, February 21). Number of People with Master's and Doctoral Degrees Doubles Since 2000. Retrieved from: https://www.census.gov/library/stories/2019/02/number-of-people-with-masters-and-phd-degrees-double-since-2000.html

company that hires bilingual employees. It is important to research careers of interest to you when selecting your major and/or minor to determine what will best help you to meet your goals.

Figure 8.7 Many majors, such as nursing, allied health, and emergency medical technician, may include simulations and other activities to expose students to the real-world activities of their field. (Credit: COD Newsroom / Flickr / Attribution 2.0 Generic (CC-BY 2.0))

Preprofessional Programs

Some undergraduate degrees are specifically designed to prepare students to later pursue professional degrees (such as the MD or PharmD) at the graduate level. Such programs are called *preprofessional programs, preprofessional majors,* or *preprofessional tracks.* The most common preprofessional programs are premed, prelaw, and prepharmacy, but you may see other offerings. Although some preprofessional programs are structured as majors that you can declare, many preprofessional programs are a sequence of recommended courses and activities that a student can follow alongside a related major. While following a preprofessional program may not guarantee your admittance to a professional program, it does increase the likelihood of acceptance to and preparation for a graduate professional program.

Consider Loretta's story as an example of how a student might be on a preprofessional track. Loretta has decided that she would like to become a medical doctor. She has declared biology as her major and is taking the courses required to graduate with a bachelor of science degree in biology. Her university does not have a premed major, but it does have a premed track. She informs her academic advisor of her career goals, and her advisor provides her information about the premed track. The premed track includes a list of courses that students should take to prepare for the medical school entrance exams, called MCATs. Some of these courses are biology courses that overlap with Loretta's biology major, while others are higher-level chemistry courses that are not required for her major. She can take these chemistry courses, and any other premed-track courses, as her elective courses. The premed track at Loretta's university includes opportunities to attend MCAT study workshops and premed student club meetings. It also provides recommendations for summer volunteering and internships that will strengthen Loretta's resume and application to medical school following the completion of her bachelor's degree.

Special Requirements of Majors

While preprofessional programs prepare students for entrance into graduate professional degree programs, some undergraduate majors involve special requirements beyond the usual courses and classroom experience to prepare students for entrance to their career. Such requirements provide students practical experience or

prerequisites for licensure necessary for a particular job. When requirements are major-specific, it is often because the requirement is state-mandated for that job. Majors that often include state-mandated special requirements are education, social work, and nursing. Some colleges and universities may require all students to participate in additional experiences beyond their regular coursework. You will want to ask your college about details specific to your major or institution. In this section we will generally discuss four such special requirements and experiences: fieldwork and internships, clinicals, student teaching, and service learning.

Fieldwork and Internships

Fieldwork and internships may also be referred to as *practicums* and field experience. These requirements provide hands-on work experience in a career, or *field*. When fieldwork or internships are required for your major, such as with a social work major, it is often listed as a course requirement among your major requirements. In other words, you usually receive credits for your fieldwork as you would for a lab or lecture course. Your fieldwork instructor will likely ask you to reflect on and report on your experiences. They will likely confer with a supervisor at your *fieldwork site*, the place where you are working, to help assess your hands-on learning. Fieldwork and internships provide students with opportunities to practice the skills they've learned in the classroom while also introducing them to the values and culture of the organizations and communities in which they hope to be employed. It is important to note that fieldwork and internship experiences are often available to students even if they are not required for their major. You may want to inquire with your academic advisors, faculty, or career services office to determine what opportunities might be available for you to gain this type of experience in your field of interest.

Clinicals

Clinicals are a type of fieldwork specifically required of nursing students. Clinicals may take place in hospitals, nursing homes, or mental health facilities. They provide nursing students who are nearing the end of their degree programs with the opportunity to practice nursing skills that cannot be learned in a regular classroom. During clinicals, students will interact with real patients to conduct physical examinations, draw blood, administer medicine, and provide other care as necessary. Because of the risk to patients, students participating in clinicals are more closely supervised by experienced professionals than those in other types of fieldwork experiences. Thus, clinicals function very much like a real-world classroom and progress to more independent work through the semester. Before undertaking clinicals, nursing students will need to complete certain coursework and pass a physical examination and background check. Because clinicals are often much longer than a class meeting, students will need to work with staff from the program to plan their schedule. It may not be feasible to work at another job while completing clinicals, so if you must work while you're in college, it's important to discuss this with nursing staff or academic advisors and to plan ahead.

Student Teaching

Student teaching is a specific type of fieldwork undertaken by students who plan to teach at the preschool, elementary, or middle and high school levels. Education students are often required to complete a student teaching experience in order to obtain a teaching license in their state. Students must often complete core education coursework prior to student teaching and must complete a background check prior to placement in a school setting. During their student teaching experience, students are usually paired one-on-one with an experienced teacher and have the opportunity to observe that teacher, get to know the students, understand the classroom culture, and participate in lessons as a teaching assistant as needed or appropriate. Much like nursing clinicals, this highly supervised fieldwork experience usually progresses to more independent work when the student teacher is asked to deliver and reflect on a lesson plan of their own design. Keep in mind as you plan for student teaching, that, unlike other fieldwork experiences, student teaching is limited to fall or spring semesters and cannot be completed in the summer because most schools are closed during the summer terms. Also, it may not be feasible to work at another job while completing your student teaching experience, so if you must work while you're in college, it's important to discuss this with your program staff or academic advisors and to plan ahead.

Figure 8.8 Student teaching is an extremely important aspect of becoming a K-12 educator. The experience helps future teachers practice their skills and understand the complexity of working in the classroom. (Credit: seansinnit / Flickr / Attribution 2.0 Generic (CC-BY 2.0))

Service Learning

While service learning may not be required of a specific major, you may see this special requirement for a course or as a general graduation requirement for your college or university. It's also an excellent opportunity to try out something that interests you, something that could lead to or be part of your eventual career.

Service learning is very much like volunteering or community service. The purpose of service learning is to interact with and meet the needs of your local community. Service learning does differ from volunteering in that it is more structured to meet specific learning goals. For example, if you were engaging in service learning for an environmental science course, your activities would likely be focused on local environmental issues. Or, if you were engaging in service learning for a sociology course, you would likely be working with local community groups or organizations not only to assist these organizations, but also to observe how groups interact. Like fieldwork, service learning provides you an opportunity to observe and apply concepts learned in the classroom in a real-world setting. Students are often asked to reflect on their service learning activities in the context of what they've been learning in class, so if you're engaged in service learning, be thinking about how the activities you do relate to what you've learned and know.

8.3 | Making a Plan

Estimated completion time: 28 minutes.

Questions to Consider:

- What resources are available to help me understand my degree program requirements?
- Who can assist me in making a plan?
- What tools are available to help me develop and track the progress of my plan?
- Is there anything else I can do now to plan for after I graduate?

As previously noted, most associate degrees require a minimum of 60 credit hours for completion, and bachelor's degrees minimally require a total of 120 credits. Some individuals refer to these degrees as "two-year" and "four-year" degrees, respectively. To complete a 60-credit associate degree in two years, you would need to take 15 credits (about five classes) in the fall and spring semesters during both years of your attendance. To complete a 120-credit bachelor's degree in four years, you would need to take 15 credits in the fall and spring semesters each of your four years. It is therefore entirely possible to complete these degrees in

two and four years, particularly if you use the three primary resources that colleges provide to help you with your planning: curriculum maps, academic advisors, and interactive planning technology.

Curriculum Maps

Many colleges and universities will provide *curriculum maps*, or course checklists to illustrate the sequence of courses necessary to follow this timeline. These timelines often assume that you are ready to take college-level math and English courses and that you will be attending college as a full-time student. If placement tests demonstrate a need for prerequisite math and English coursework to get you up to speed, your timeline will likely be longer.

Many students attend college part-time, often because of family or work responsibilities. This will obviously have an impact on your completion timeline as well. Programs that have special requirements may also require that you plan for additional time. For example, it may be the case that you cannot take other courses while completing clinicals or student teaching, so you will need to plan accordingly. Alternatively, you may be able to speed up, or *accelerate*, your timeline to degree by taking courses during summer or winter terms. Or if you take fewer than 15 credits per semester, you can take courses during the summer terms to "make up" those credits and stay on track toward those two- or four-year graduation goals.[3]

Academic Advisors

All colleges and universities provide resources such as a academic advisors to assist you with your academic planning. Academic advisors may also be called success coaches, mentors, preceptors, or counselors. They may be staff members, or faculty may provide advisement as an additional role to their teaching responsibilities. Regardless of what your college calls this role, academic advisors are individuals who are able to assist you in navigating the puzzle of your academic plan and piecing your courses and requirements together with your other life obligations to help you meet your goals.

An advisor is an expert on college and major requirements and policies, while you are the expert on your life circumstances and your ability to manage your study time and workload. It is also an advisor's responsibility to understand the details of your degree requirements. This person can teach you how to best utilize college resources to make decisions about your academic and career path. An advisor can help you connect with other college staff and faculty who might be integral to supporting your success. Together with your advisor, you can create a semester-by-semester plan for the courses you will take and the special requirements you will meet. Refer to the end of this section for a detailed planning template that you could use in this process. Even if your college does not require advising, it is wise to meet with your advisor every semester to both check your progress and learn about new opportunities that might lend you competitive advantage in entering your career.

Common Functions of Academic Advisors

Academic advisors can help you:

- Set educational and career goals
- Select a major and/or minor
- Understand the requirements of your degree
- Navigate the online tools that track the progress of your degree
- Calculate your GPA and understand how certain choices may impact your GPA
- Discuss your academic progress from semester to semester
- Assist with time management strategies
- Connect with other support and resources at the college such as counseling, tutoring, and career services
- Navigate institutional policies such as grade appeals, admission to special programs, and other concerns

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3 Brookdale Community College Office of Career and Leadership Development. (2016). *Your Career Checklist*. Retrieved from: http://www.brookdalecc.edu/career

- Strategize how to make important contacts with faculty or other college administrators and staff as necessary (such as discussing how to construct professional emails)
- Discuss transfer options, if applicable
- Prepare for graduate school applications

APPLICATION

Academic Planning Readiness Checklist: Review the checklist below and mark each item if you agree. For those you cannot yet answer, consult your instructor, academic advisor, or college website to locate these important details.

1. I know the total number of credits required to graduate from my program.
2. I know the difference between general education, major, and elective classes.
3. I know whether I am required to take preparatory or developmental courses in math and English, and whether these courses will count among my total credits toward my degree.
4. I am aware of the special requirements of my major (if any) and the prerequisites I must complete.
5. I am aware of the minimum entry requirements for my desired career field and know whether I should be preparing to plan for a graduate degree as well.

ACTIVITY

Draft an Academic Plan

With the assistance of your instructor or academic advisor, find the curriculum map for your major or for an example major that you might be considering if you're still exploring. Use the information in the curriculum map to draft an academic plan for your undergraduate degree. This plan should include both a semester-by-semester sequence of courses and a list of related activities to help you progress toward your career or graduate school goals. Keep in mind any personal circumstances that may impact your plan (such as whether you'll need to attend part-time or full-time). You may use the grid provided or utilize your college's student planning software if available. For your reference, you will find the start of an example grid from a dedicated environmental science student below.

Note: If your college offers courses using the quarter system rather than semesters, you may need to draft your own grid. You can find example planning grids for quarter systems online.

Example Semester # 1 : Fall 20 __ __	Example Semester # 2 : Spring 20 __ __
List your planned courses here:	*List your planned courses here:*
English Composition 1 (3 credits)	English Composition 2 (3 credits)
General Biology 1 + lab (4 credits)	General Biology 2 + lab (4 credits)
Environmental Science (4 credits)	Principles of Sustainability (3 credits)
History of Western Civilization (3 credits)	Pre-Calculus Mathematics (4 credits)
First Year Success Seminar (2 credits)	Total semester credits – 14
Total semester credits – 16	Total first year credits planned – 30
List your planned activities here:	*List your planned activities here:*
• Meet with my advisor to review my plan. • Attend an environmental science student club meeting.	• Visit with Career Services Office early to ask about summer volunteering related to my major

Example Summer Plans:

List your planned courses here: None this summer

List your planned activities here: Volunteer for local road or park clean-up days or start one if none exist in my area, follow and read that blog I found about becoming an environmental policy advocate, and research possible internships for my 2nd or 3rd year.

Figure 8.9 This sample of an academic plan was completed with the help of a college advisor. Below you'll find a blank template that you can use (or adapt) for your own plan.

Example Semester # 1 :	Example Semester # 2 :
List your planned courses here:	*List your planned courses here:*
List your planned activities here:	*List your planned activities here:*

Example Summer Plans:

List your planned courses here:

List your planned activities here:

Example Semester # 1 :	Example Semester # 2 :
List your planned courses here:	*List your planned courses here:*
List your planned activities here:	*List your planned activities here:*

Example Summer Plans:

List your planned courses here:

List your planned activities here:

Figure 8.10 This two-year version of the planning document may need to be adopted for colleges operating on a quarter, trimester, or other schedule. (Downloadable versions are available at OpenStax.org.)

8.4 | Using the Career Planning Cycle

Estimated completion time: 30 minutes.

Questions to Consider:

- What steps should I take to learn about my best opportunities?
- What can I do to prepare for my career while in college?
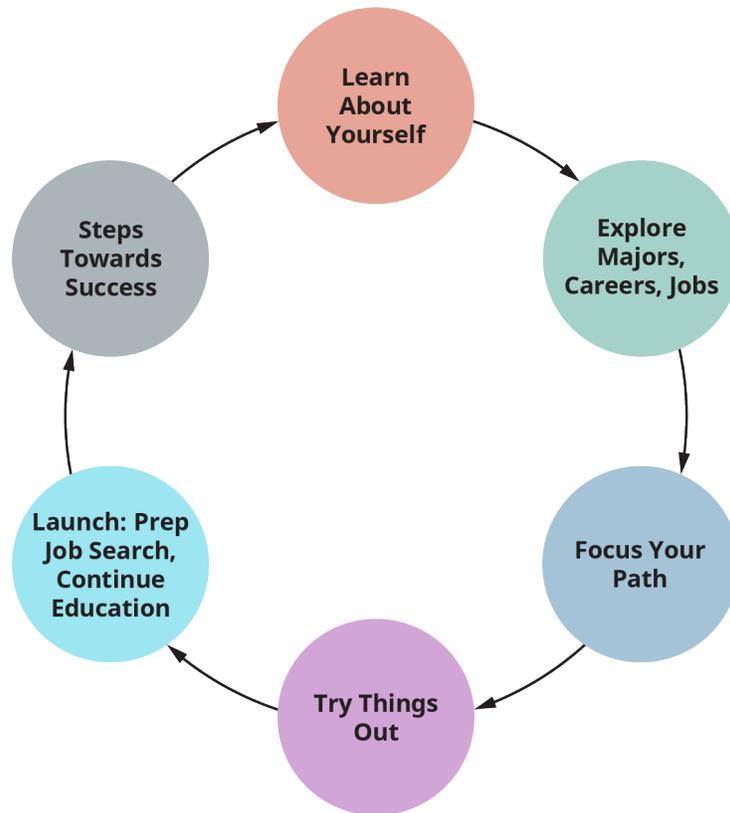- What experiences and resources can help me in my search?

Figure 8.11 You can use the Career Planning Cycle to consider and reconsider your approach and progress in choosing and moving toward a career. (Credit: Based on work by Lisa August.)

The Career Planning Cycle helps us apply some concrete steps to figuring out where we might fit into the work world. If you follow the steps, you will learn about who you truly are, and can be, as a working professional. You will discover important knowledge about the work world. You will gain more information to help you make solid career decisions. You will get experience that will increase your qualifications. You will be more prepared to reach your professional goals. And the good news is that colleges and universities are set up nicely to help you utilize this process.

Learn About Yourself

To understand what type of work suits us and to be able to convey that to others to get hired, we must become experts in knowing who we are. Gaining **self-knowledge** is a lifelong process, and college is the perfect time to gain and adapt this fundamental information. Following are some of the types of information that we should have about ourselves:

- **Interests:** Things that we like and want to know more about. These often take the form of ideas, information, knowledge, and topics.

- **Skills/Aptitudes**: Things that we either do well or can do well. These can be natural or learned and are usually skills—things we can demonstrate in some way. Some of our skills are "hard" skills, which are specific to jobs and/or tasks. Others are "soft" skills, which are personality traits and/or interpersonal skills that accompany us from position to position.
- **Values:** Things that we believe in. Frequently, these are conditions and principles.
- **Personality:** Things that combine to make each of us distinctive. Often, this shows in the way we present ourselves to the world. Aspects of personality are customarily described as qualities, features, thoughts, and behaviors.

In addition to knowing the things we can and like to do, we must also know how well we do them. What are our strengths? When employers hire us, they hire us to do something, to contribute to their organization in some way. We get paid for what we know, what we can do, and how well or deeply we can demonstrate these things. Think of these as your Knowledge, Skills, and Abilities (KSAs). As working people, we can each think of ourselves as carrying a "tool kit." In our tool kit are the KSAs that we bring to each job. As we gain experience, we learn how best to use our tools. We gain more tools and use some more often than others, but all the tools we gather during our career stay with us in some form.

Formal Assessments

Formal assessments are typically referred to as "career tests." There are thousands available, and many are found randomly on the Internet. While many of these can be fun, "free" and easily available instruments are usually not credible. It is important to use assessments that are developed to be reliable and valid. Look to your career center for their recommendations; their staff has often spent a good deal of time selecting instruments that they believe work best for students.

Here are some commonly used and useful assessments that you may run across:

- **Interest Assessments:** Strong Interest Inventory, Self-Directed Search, Campbell Interest and Skill Survey, Harrington-O'Shea Career Decision-Making System
- **Personality Measures:** Myers-Briggs Type Indicator, CliftonStrengths (formerly StrengthsQuest), Big Five Inventory, Keirsey Temperament Sorter, TypeFocus, DiSC
- **Career Planning Software:** SIGI 3, FOCUS 2

Informal Assessments

Often, asking questions and seeking answers can help get us information that we need. When we start working consciously on learning more about any subject, things that we never before considered may become apparent. Happily, this applies to self-knowledge as well. Some things that you can do outside of career testing to learn more about yourself can include:

Self-Reflection:

- Notice when you do something that you enjoy or that you did particularly well. What did that feel like? What about it made you feel positive? Is it something that you'd like to do again? What was the impact that you made through your actions?
- Most people are the "go to" person for something. What do you find that people come to you for? Are you good with advice? Do you tend to be a good listener, observing first and then speaking your mind? Do people appreciate your repair skills? Are you good with numbers? What role do you play in a group?
- If you like to write or record your thoughts, consider creating a career journal that you update regularly, whether it's weekly or by semester. If writing your own thoughts is difficult, seek out guided activities that help prompt you to reflect.
- Many colleges have a career planning course that is designed to specifically lead you through the career decision-making process. Even if you are decided on your major, these courses can help you refine and plan best for your field.

Explore Jobs and Careers

Many students seem to believe that the most important decision they will make in college is to choose their major. While this is an important decision, even more important is to determine the type of knowledge you would like to have, understand what you value, and learn how you can apply this in the workplace after you graduate. For example, if you know you like to help people, this is a value. If you also know that you're interested in math and/or finances, you might study to be an accountant. To combine both of these, you would gain as much knowledge as you can about financial systems and personal financial habits so that you can provide greater support and better help to your clients.

The four factors of self-knowledge (interests, skills/aptitudes, values, and personality), which manifest in your KSAs, are also the factors on which employers evaluate your suitability for their positions. They consider what you can bring to their organization that is at once in line with their organization's standards and something they need but don't have in their existing workforce.

Along with this, each job has KSAs that define it. You may think about finding a job/career as looking like the figure below.
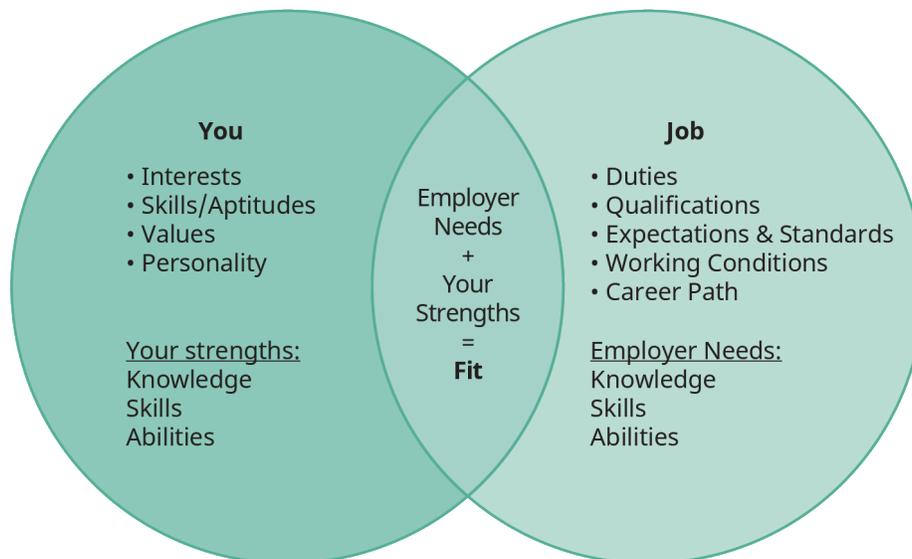

You

• Interests
• Skills/Aptitudes
• Values
• Personality

Your strengths:
Knowledge
Skills
Abilities

Employer
Needs
+
Your
Strengths
=
Fit

Job

• Duties
• Qualifications
• Expectations & Standards
• Working Conditions
• Career Path

Employer Needs:
Knowledge
Skills
Abilities

Figure 8.12 Your fit for a job lies at the intersection of your attributes and the elements of the position. When your strengths align with the employer needs, both can mutually benefit.

The importance of finding the right fit cannot be overstated. Many people don't realize that the KSAs of the person and the requirements of the job have to match in order to get hired in a given field. What is even more important, though, is that when a particular job fits your four factors of self-knowledge *and* maximizes your KSAs, you are most likely to be satisfied with your work! The "fit" works to help you not only get the job, but also enjoy the job.

So if you work to learn about yourself, what do you need to know about jobs, and how do you go about learning it? In our diagram, if you need to have self-knowledge to determine the YOU factors, then to determine the JOB factors, you need to have workplace knowledge. This involves understanding what employers in the workplace and specific jobs require. Aspects of workplace knowledge include:

• **Labor Market Information:** Economic conditions, including supply and demand of jobs; types of industries in a geographic area or market; regional sociopolitical conditions and/or geographic attributes.
• **Industry Details:** Industry characteristics; trends and opportunities for both industry and employers; standards and expectations.
• **Work Roles:** Characteristics and duties of specific jobs and work roles; knowledge, skills, and abilities necessary to perform the work; training and education required; certifications or licenses; compensation;

promotion and career path; hiring process.

This "research" may sound a little dry and uninteresting at first, but consider it as a look into your future. If you are excited about what you are learning and what your career prospects are, learning about the places where you may put all of your hard work into practice should also be very exciting! Most professionals spend many hours not only performing their work but also physically being located at work. For something that is such a large part of your life, it will help you to know what you are getting into as you get closer to realizing your goals.

There are many and varied types of experiential learning opportunities that can help you learn more about different career opportunities. The table below provides a brief overview.

Internship and Experiential Learning Terminology

Internship	A period of work experience in a professional organization, in which participants (interns) are exposed to and perform some of the tasks of actual employees. Internships are usually a relatively high commitment, and may be paid and/or result in college credit.
Externship/Job Shadowing	Usually a briefer and lower-commitment experience than internships, in which participants observe work activities and perhaps undertake small projects. Unpaid and not credit-bearing.
Fieldwork	A period or trip to conduct research or participate in the "natural environment" of a discipline or profession. Fieldwork may involve visiting a work site, such as a hospital or nursing home, or being a part of a team gathering data or information.
Apprenticeship	A defined period of on-the-job training in which the student is formally doing the job and learning specific skills. Unlike most internships, apprenticeships are usually formal requirements to attain a license or gain employment in skilled trades, and they are growing in use in health care, IT, transportation, and logistics.
Undergraduate Research	Even as an undergrad, you may find opportunities to partake in actual research in your field of study. Colleges often have strict guidelines on types and levels of participation, and you will likely need to apply. The benefits include firsthand knowledge of a core academic activity and exposure to more people in your field.
Related Employment	It may be possible to get a regular, low-level paying job directly in your field of study or in a related place of work. While it's not essential, simply being around the profession will better inform and prepare you.

Table 8.4

Clinicals, Student Teaching, and Related Experiences	Health care, education, and other fields often have specific requirements for clinicals (learning experience in health care facilities) or student teaching. These are often components of the major and required for both graduation and licensure.
Service Learning	Students learn educational standards through tackling real-life problems in their community. Involvement could be hands-on, such as working in a homeless shelter. Students could also tackle broad issues in an indirect manner, such as by solving a local environmental problem.

Table 8.4

What to Do to Get Ready

Being prepared to find a job means putting evidence of your KSAs together in a way that employers will understand. It is one thing to say you can do something; it is another to show that you can. The following are things that you will want to compile as a part of your college career.

Resumes and Profiles: The College Version

You may already have a resume or a similar profile (such as LinkedIn), or you may be thinking about developing one. Usually, these resources are not required for early college studies, but you may need them for internships, work-study, or other opportunities. When it comes to an online profile, something that is a public resource, be very considerate and intentional when developing it.

Resume

A resume is a summary of your education, work experience, and other accomplishments. It is not simply a list of what you've done; it's a showcase that presents the best you have to offer for a specific role. While most resumes have a relatively similar look and feel, there are some variations in the approach. Especially when developing your first résumé or applying in a new area, you should seek help from resources such as career counselors and others with knowledge of the field. Websites can be very helpful, but be sure to run your resume by others to make sure it fits the format and contains no mistakes.

A resume is a one-page summary (two, if you are a more experienced person) that generally includes the following information:

- Name and contact information
- Objective and/or summary
- Education—all degrees and relevant certifications or licenses
  - While in college, you *may* list coursework *closely related* to the job to which you're applying.
- Work or work-related experience—usually in reverse chronological order, starting with the most recent and working backward. (Some resumes are organized by subject/skills rather than chronologically.[4])
- Career-related/academic awards or similar accomplishments
- Specific work-related skills

While you're in college, especially if you go to college directly after high school, you may not have formal degrees or significant work experience to share. That's okay. Tailor the resume to the position for which you're applying, and include high school academic, extracurricular, and community-based experience. These show your ability to make a positive contribution and are a good indicator of your work ethic.

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4 Writing@CSU. "Organizing Your Resume." https://writing.colostate.edu/guides/page.cfm?pageid=1517&guideid=77

If you have significant experience outside of college, you should include it if it's relatively recent, relates to the position, and/or includes transferable skills (discussed above) that can be used in the role for which you're applying. Military service or similar experience should nearly always be included. If you had a long career with one company quite some time ago, you can summarize that in one resume entry, indicating the total years worked and the final role achieved. These are judgment calls, and again you can seek guidance from experts.

Henry Townsend   **2438 McNair Avenue, Apartment 3**
htownse@stlu.mi.edu   **St. Louis, Missouri**

**Summary**
Highly organized audiology major with excellent communication skills and extensive customer service background. Currently focused on gaining clinical experience and leadership skills.

**Education**
St. Louis University, St. Louis, Missouri
Major: Communication Disorders, Focus on Audiology; Expected Graduation 2024
Activities: Pep Band, Concert Band, Comms Club

Spring Lakes High School, Crimson, Virginia, 2020
Cumulative G.P.A: 3.6
Rotary Public Service Award
Founder and President, Hip Hop Health -- hospital patient music program

**Experience**
Student Relations Coordinator
St. Louis Children's Hospital   2021-Present

Circulation Clerk
St. Louis University Library   2020-Present

Service Desk Representative
Forte Equipment Rental, Virginia Beach   2019-2021

**Skills**
American Sign Language, Near Fluent
Google Sheets and Slides, Highly Proficient
Zendesk and Salesforce, Highly Proficient

Figure 8.13 Resumes summarize your accomplishments, education, skills, and experience.

Digital Profiles

An online profile is a nearly standard component of professional job seeking and networking. LinkedIn is a networking website used by people from nearly every profession. It combines elements of résumés and portfolios with social media. Users can view, connect, communicate, post events and articles, comment, and recommend others. Employers can recruit, post jobs, and process applications. Alternatives include Jobcase, AngelList, Hired, and Nexxt. These varying sites work in similar ways, with some unique features or practices.

Some professions or industries have specific LinkedIn groups or subnetworks. Other professions or industries may have their own networking sites, to be used instead of or in addition to LinkedIn. Industry, for example, is a networking site specifically for culinary and hospitality workers.

As a college student, it might be a great idea to have a LinkedIn or related profile. It can help you make connections in a prospective field, and provide access to publications and posts on topics that interest you. Before you join and develop a public professional profile, however, keep the following in mind:

- **Be professional.** Write up your profile information, any summary, and job/education experience separately, check for spelling and other errors, and have someone review *before* posting. Be sure to be completely honest and accurate.
- **Your profile isn't a contest.** As a college student, you may only have two or three items to include on your profile. That's okay. Overly long LinkedIn profiles—like overly long resumes—aren't effective anyway, and a college student's can be brief.
- **Add relevant experience and information as you attain it.** Post internships, summer jobs, awards, or work-study experiences as you attain them. Don't list *every* club or organization you're in if it doesn't pertain to the professional field, but include some, especially if you become head of a club or hold a competitive position, such as president or member of a performance group or sports team.
- **Don't "over-connect."** As you meet and work with people relevant to your career, it is appropriate to connect with them through LinkedIn by adding a personal note on the invite message. But don't send connection invites to people with whom you have no relationship, or to too many people overall. Even alumni from your own school might be reluctant to connect with you unless you know them relatively well.
- **Professional networking is not the same as social media.** While LinkedIn has a very strong social media component, users are often annoyed by too much nonprofessional sharing (such as vacation/child pictures); aggressive commenting or arguing via comments is also frowned upon. As a student, you probably shouldn't be commenting or posting too much at all. Use LinkedIn as a place to observe and learn. And in terms of your profile itself, keep it professional, not personal.
- **LinkedIn is not a replacement for a real resume.**

Building Your Portfolio

Future employers or educational institutions may want to see the work you've done during school. Also, you may need to recall projects or papers you wrote to remember details about your studies. Your portfolio can be one of your most important resources.

Portfolio components vary according to field. Business students should save projects, simulations, case studies, and any mock companies or competitions they worked on. Occupational therapy students may have patient thank-you letters, summaries of volunteer activity, and completed patient paperwork (identities removed). Education majors will likely have lesson plans, student teaching materials, sample projects they created, and papers or research related to their specialization.

Other items to include in your portfolio:

- Evidence of any workshops or special classes you attended. Include a certificate, registration letter, or something else indicating you attended/completed it.
- Evidence of volunteer work, including a write-up of your experience and how it impacted you.
- *Related* experience and work products from your time prior to college.
- Materials associated with *career-related* talks, performances, debates, or competitions that you delivered or took part in.
- Products, projects, or experiences developed in internships, fieldwork, clinicals, or other experiences (see below).
- Evidence of "universal" workplace skills such as computer abilities or communication, or specialized abilities such as computation/number crunching.

A portfolio is neither a scrapbook nor an Instagram story. No need to fill it with pictures of your college experience unless those pictures directly relate to your career. If you're studying theology and ran a religious camp, include a picture. If you're studying theology and worked in a food store, leave it out.

Certain disciplines, such as graphic design, music, computer science, and other technologies, may have more specific portfolio requirements and desired styles. You'll likely learn about that in the course of your studies, but be sure to proactively inquire about these needs or seek examples. Early in your college career, you should be most focused on gathering components for your portfolio, not formalizing it for display or sharing.

Preparing to Network

Throughout this chapter, we have discussed how important relationships are to your career development. It can sometimes be a little intimidating to meet new people in the professional environment. But with preparation and understanding, these encounters can be not only helpful, but also rewarding. Here are some ideas to consider when meeting new people who can be helpful to your career:

- **Be yourself.** You're your own best asset. If you're comfortable with who you are and where you come from, others will be, too.
- **Remember, you're in college and they know it.** Don't try to impress everyone with what you *know*; alumni or faculty know more. Instead, talk about what you're *learning*—your favorite class, the project you're most proud of, or even the ones by which you've been most challenged.
- **Be polite, not too casual.** If your goal is to become a professional, look and sound the part.
- **Listen.**
- **Think of some questions ahead of time.** Don't aim for difficult questions or anything too personal, but asking people how they got into their career, with whom they studied in college, what their job is like, and similar questions will both start conversations and provide you with meaningful insight.
- **Don't stress.** Remember, if alumni, even highly successful ones, are speaking to you, it's usually because they want to. An encounter over finger food or a brief meetup in the Rad Tech department office isn't going to make or break your job prospects.
- **If appropriate and timely, ask if you can keep in touch.** Be prepared with a polished email address and phone number. For example, if your current address is "fortnitefan@gmail.com," consider creating a second account that's more professional.
- **Say thank you.** No need to go on and on, but thank them for any advice they give or simply for taking the time to talk with you

  While you're in college, don't try to impress everyone with what you *know*. Instead, talk about what you're *learning*.

Making Your Case through the Words of Others: Letters of Recommendation

Whether you go on to graduate school or directly into the workforce (or both at the same time), decision makers will want to learn more about you. Your grades, interviews, test scores, and other performance data will tell them a lot. But sometimes they'll want to hear from others.

Letters of recommendation are often a standard component of convincing people you're the right person to join their organization. Some positions or institutions require a certain quantity of letters and may have specific guidance on who should write them. Other companies will accept them as additional evidence that you're a great candidate. Either way, gathering such letters or having a few people whom you can ask for them will put you in a better position. Note that internships, especially competitive ones, may also require letters of recommendation.

Figure 8.14 When you ask someone to write you a letter of recommendation, be prepared to share information about your goals, your accomplishments, and why you are asking the person in particular. Don't assume that they know which strengths or experience of yours to highlight. (Credit: US Embassy Jerusalem / Flickr / Attribution 2.0 Generic (CC-BY 2.0))

▤ Summary

This chapter began by describing the process of creating short-term, long-term, and SMART goals that can serve as motivation for you. After a discussion of the relationship between short- and long-term goals and the importance of tracking the progress of our goals, the chapter dove into the specifics of academic plans. Sections on degree types and the special considerations and requirements of certain programs should help you understand the type of opportunities that may be available to you and the types of questions you should research and ask. The section on planning your semesters provided you with the types of resources, people, and tools that you should look for when developing your academic plan. The final section shared some basic job-seeking advice and information that will allow you to begin the process of building the components needed to apply for positions during and after college.

To make the most of the time you have in college to explore and plan for your future, consider what you can do now to create your educational and career pathway. Choose one of the following to explore further or do this term:

- Take a variety of values, interests, skills, and personality inventories to learn more about what kinds of career environments and tasks would be worth pursuing.
- Create a degree plan for yourself that includes opportunities to participate in experiential learning and activities such as internships and service learning.
- Explore additional education or credentials you may need to fulfill your career goals.
- Begin to create a resume or professional profile via social media that shares the experiences you have.

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