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As current faculty director of the SuccessWorks Taking Career Initiative and Communicating About Careers courses, I take full responsibility for all claims (and errors) in this student guide; please do not hesitate to contact me with any concerns or ideas for future editions.

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1 Getting ready to write your career narrative

“Let me tell you a story.”

Roughly thirty years ago, my life was much like yours is today as a UW-Madison student. I too was an undergraduate at a large, public, land-grant research university in the midwest, trying to meet my general education requirements, to choose among different options for a major, and to graduate on time with as many job prospects (and as little debt) as possible.

I remember facing a lot of tough choices. I was taking more than a full load of classes, so I didn’t participate in as many extra-curricular activities as I probably should have. But I managed to find a part-time job as a tutor in a computer lab (which helped me develop teaching skills), did a bit of community fundraising work through student-led campus groups (like putting on a Halloween haunted house), and even wrote a daily comic strip for the student newspaper (even though I couldn’t draw very well). The variety of these experiences was all the more important because my major wasn’t in education, or social services, or art — it was in computer science.

Of course, I also sought out experiences relating to my CS major. In the summers after my freshman and sophomore years, I was hired for paid
internships with hometown technology firms (which I found through family social connections). In the summers after my junior and senior years, I was chosen for a paid research assistantship with a local government engineering organization (which I found through friendship social connections). And while I went on half-a-dozen interviews with major technology firms that I connected with through my campus career services office, the job I ended up taking was one I found through an outside job-placement company thanks to one of my classmates who worked there. So even before I graduated from college, I owed my success in securing paid employment that was connected to my major not only to formal structures in the public sector and the private market, but also to informal social networks.

Oh, and I should mention, this was in 1989, and there was really no such thing as emailed résumés, laptop computers, cell phones, or the World Wide Web.

My first full-time job in computer programming after college taught me a lot — not just about coding and data, but about writing a proper business memo, dealing with an unreasonable supervisor, and other such “soft skills” in addition to the technical skills I had been hired for. However, like many of my peers, I only stayed at this first organization (a global advertising firm in the for-profit sector) for about two-and-a-half years before I moved on to my second computer programming job at a new organization (a global research university in the non-profit sector). I found that second job, again, through a combination of scouring formal job listings and hearing about opportunities from friends who I had kept in contact with after college.

Oh, and while that second job wasn’t at all a step up in salary, as it turned out it was a clear step closer to what I realized I wanted to do with my life.

Finally, after another two-and-a-half years in that second job, my career story took its most surprising turn. While taking classes towards a part-time Master’s degree — and doing part-time volunteer service with a local community development organization — I decided I wanted to go back to graduate school full-time and pursue a Ph.D. in order to become a college professor. In some ways this makes my story unusual — I literally had an “aha!” moment while bicycling home from my very last class of my Master’s program — but actually, it turned out I was addressing an interest (and a strength) that dated all the way back to when I was an undergraduate. You see, while finishing my college degree in computer science, I could have pursued a second major in a humanities or social science field, but I decided to load up on technical courses instead. It wasn’t a bad decision at the time — it helped me to get those first two programming jobs, and all the experience that came with them. But as it turned out, that other side of my interests and strengths eventually drew me back.

So in phase two of my career story, I applied to and was accepted to a graduate program where I could apply my technological training to a deep liberal arts field. Once again I was a student, and once again I was filling my
summers with internships and service work (this time unpaid). My income took a steep drop while I pursued my studies, but I was allowed access to a new social network of scholars from whom I could learn amazing things. And eventually, that same combination of interdisciplinary education, plus a wide variety of for-profit and non-profit work experience, helped me to land a professor job here at UW-Madison, where I remain today.

Why relate this very personal and admittedly idiosyncratic story at the start of this student guide? Because understanding your own educational and work history as an unfolding career narrative over time and space — a story of education, work, and accomplishment that you keep revising and reinterpreting as your skills, experiences, and goals grow and change over the course of your life — is not only the best way to understand your own career trajectory, but also the best way to communicate the value that you can bring to an organization when seeking your next career challenge. Management consultant Todd Putman, in his 2015 book *Be More*, argued that such stories are crucial to career success: “It’s your story—to own and to tell. [...] It happens every minute of every day. People size you up. They see you in a context that defines you. If you don’t create that context, if you don’t tell your story, someone else will.” (10) And as education journalist Jeffrey Selingo (2015) puts it, “People with good stories show employers they can transfer their learning from one environment to another, typically from the classroom to the workplace.” (238)

This student guide will help you to create your own career narrative: interpreting your story as you reflect on your strengths and experiences; setting your story in context of the broad changes happening to the global economy; writing the current chapter of your story through your university education here at UW-Madison; and finally, retelling your story to colleagues, teachers, and decision-makers who can help you on the next step of your career path.
The first page of Professor Downey’s CV demonstrates his career narrative.
L&S SuccessWorks

The UW-Madison College of Letters and Science (L&S) has created the SuccessWorks center to help you sift through the wide array of options in front of them — from classes and certificates to majors to career communities — as you write the first chapter in your own career narrative. Located in the 3rd floor above the University Bookstore on the Library Mall, SuccessWorks is your one-stop location to learn to use your diverse skill sets to contribute to today’s rapidly-changing economy — in Wisconsin and beyond.

As UW-Madison’s largest college, L&S offers 65 undergraduate majors and 39 certificates, providing students with plenty of possibilities. Choosing the best fit, though — and tying it to a future career — can be challenging. Even the most popular majors in L&S (and on campus as a whole) — biology, economics, political science, psychology and history — don’t necessarily lend themselves to obvious, ready-made career paths.

That’s where SuccessWorks can help: it is a first-of-its-kind model for large, public universities. The staff at SuccessWorks will help you to assess and reflect on your strengths, experiences, and interests, connecting them to classes, to a major, and eventually, to a career. SuccessWorks is your gateway to the more than 200,000 UW alumni who can help you find new career opportunities throughout your life. And SuccessWorks counts a growing list of employer partners who can provide even more support for your job search, including regional, national, and global firms like American Family Insurance, Epic, Altria, Covance, Milwaukee Tool, Cintas, Enterprise and Citi.

Benefits of visiting SuccessWorks

- **Preparation**
  - Analyze your previous experience
  - Explore your career interests

- **Networking**
  - Exclusive access to alumni and faculty
  - Work with like-minded students

- **Action**
  - Find and apply for opportunities
  - Get personalized career advice

UW-Madison (2016)
At SuccessWorks -- and in this student guide -- you’ll find expert advice from UW-Madison career advisers, tips on creating your own LinkedIn profile, and guidelines for composing a résumé targeted to a specific opportunity. But you’ll also learn to find connections between your classes and your extracurricular activities. You’ll discover how to draw both abstract, conceptual knowledge and concrete, pragmatic skills out of your liberal arts experiences. Every service is designed to help you build your career narrative.

Here’s an example of just some of the things that SuccessWorks did for students during the 2017-2018 academic year:

- Helped bring 325 employers to meet students at UW-Madison career fairs and evening events
- Signed up more than 6,000 employers to post jobs and internships through UW’s new online platform, Handshake
- Ran training sessions for “mock interviews” with 182 students who got to practice their communication skills with two dozen real employers
- Hosted two dozen employers who held formal on-campus job or internship interviews with 262 students

L&S Dean John Karl Scholz sees the SuccessWorks center as a way to tap into the college’s robust alumni network, while also ensuring that L&S students use their time at UW-Madison as productively as possible: “To land rewarding jobs and launch successful careers, students must think and act strategically, much earlier in their college careers than ever before,” says Scholz. “Our goal is to help every L&S student — not just the extra-motivated or well-connected few — chart his or her path to success.”
Comparable services on the private market are out of reach for many; as reported in the *New York Times* recently, “some companies charge $300 an hour for services that might involve deciphering strengths, arranging job shadowing and working on résumés, interview techniques and job search strategies. Walking a student through an extended exploration can run $5,000.” (Pappano 2016) But we offer SuccessWorks services to all L&S students through regular courses, access to professional advisers, and even online. “We want to build a launching pad for our students that will take them higher, sooner,” says Scholz. “We aspire to set a new standard for career preparation among the nation’s great public research universities.”

**Your Career Journey**

The services offered by SuccessWorks are structured around a simple idea: the *career journey*. This is an iterative (repeating) process of exploring your strengths and interests, refining your plans and experiences, and developing a competitive advantage, not only for your first job, but for a lifetime of rewarding work.
The career journey has six steps:

(1) In the **Discover** phase of the career journey, you think about and identify your strengths, interests, skills and values. For example, you might:

- Reflect on courses, activities and experiences you’ve had in the past, what you’ve learned about yourself, and how they might connect to major and career options.
- Meet with a career advisor to discuss major and career exploration based on your personality, skills, interests and values.

(2) In the **Explore** phase, you research and explore career or grad school options that match your skills and interests:
• Participate in events and connect with alumni, employers, and advisors to learn about careers of interest.

• Check out the SuccessWorks website and different career communities.

(3) In the **Engage** phase, you pick a few of your ideas to test out and see if you’re on the right path:

• Join a student organization, participate in an internship, seek meaningful employment, volunteer, conduct research, and consider study abroad opportunities to gain marketable experience.

• Continually reflect on these experiences to confirm likes, dislikes, strengths, interests and passions.

(4) In the **Plan** phase, set goals and figure out next steps to help you get where you want to go:

• Work with alumni, employers and advisors to assess and fill any gaps in experience or skill; find experiences to develop skills such as oral and written communication, quantitative, leadership and technological skills.

• If considering graduate school, determine target schools, admissions requirements, and application materials.

(5) In the **Articulate** phase, you practice communicating why you’re the right person for the job or graduate program:

• Enroll in a career or internship course or talk to an advisor to learn to intentionally articulate the connection between your major and career pursuits.

• Define what makes you unique and develop strategies to market yourself to a potential employer or graduate school program through things like interviewing, professional communication, and targeting your resume.

(6) Finally, in the **Launch** phase, you put what you have learned to work as you graduate on to your next adventure -- apply to internships, jobs, or grad schools, and make your plan into reality:

• Connect with your existing professional network for support, advice, to learn about available positions, and develop new contacts.

• Meet with a career and internship specialist to get job search support, coaching on evaluating job offers, salary negotiations, benefits packages, and graduate school acceptance decisions.

This student guide has been designed to help you get a head start on all of these phases of your career journey.
Your Circle of Support

As you might expect, SuccessWorks is staffed by professional **Career Mentors** who are able to advise and counsel students through any phase of their major search, job hunt, or career journey. Courses taught in partnership with SuccessWorks also benefit from connection to professors and graduate teaching assistants with direct experience of L&S departments and majors themselves. And dozens of successful former UW-Madison students — our **Alumni Mentors** — return each year to interact in person or via Skype with our students in classroom visits and special events as well. Together, these experts and volunteers provide a broad **circle of support** for you in the SuccessWorks community that is unmatched.
Learning goals for this student guide

As part of this circle of support, this student guide has six broad learning goals. After reading this guide, you should have a better idea of how to:

1. Effectively **mobilize conceptual knowledge** about the meaning of a “liberal education,” the college labor market, and tools for career development.

2. Analytically **evaluate diverse information sources** in exploring opportunities for education, extra-curricular experiences, and work.

3. Efficiently **practice instrumental skills** of career research, professional networking, and personal branding, through persuasive oral, written, and online communication.

4. Confidently **access and use resources** including career advising experts and alumni networking opportunities.

5. Regularly **engage in critical reflection** on your strengths and experiences, your curricular path and extra-curricular explorations, and your career goals throughout your time at UW-Madison.

6. Creatively **synthesize your accomplishments** into a coherent and evolving narrative representing your career path and life goals to date.

These learning goals are designed to support the L&S career journey (above) and to fit into the UW-Madison **Essential Learning Outcomes** for a liberal arts and sciences education (more about that in chapter 2).

Different students will put greater emphasis on different goals according to their own particular needs and experiences with career development. For example, here are some recent student reflections from the INTER-LS 210 one-credit career course sponsored by SuccessWorks:

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**Taking this class has changed the way I search for internships for this summer.** I’ll be relying mostly on networking with people I already know or that would be easy to meet and trying to get an internship at a company I would be interested in having a future with rather than a company that would teach me a lot, but isn’t all that relevant to my interests.

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**I came into this semester as a Pre-Kinesiology major thinking I wanted to be a Physical Therapist.** I struggled through the required classes I had to take, such as chemistry and biology. One day in Starbucks [...] my actual feelings of my life and my course of action came out. I hated science. There was no way I could do a job my whole life that involved science. That day I changed my major to English because I knew in my heart that I wanted to be a teacher. I
realized through Inter-LS through my wanderings diagrams and other assignments that this is what all of my life experiences were pointing towards.

I believe that the most important thing I learned from this course is being more comfortable talking with professionals. Between the professional interview, finding an alumni mentor, and the personal branding speech I feel more confident talking with potential employers and industry professionals.

I think one of the most important lessons that I took away from this course was how to brand myself. Starting out, I felt like my theater and creative background was a detriment to my engineering, and I hadn't pursued enough technical skills to be proficient in an engineering career. However, through all of the wanderings diagrams, the car statements, and especially the personal brand speech, I have figured out my hook. I am the atypical engineer. I exhibit all of the hard-working, motivated, and problem-solving qualities that an engineer has, but I can also bring the creativity to a situation.

I came into this course extremely confused and overwhelmed. I am twenty-one years old and I still am not sure what career path I want to pursue. I have yet to declare a major, and for a long time I felt that this was a horrible indication for myself. If I am unable to commit to a major how will I ever pinpoint and commit to a career? After completing this course I have learned that it is okay to be confused. Lots of students are confused and many people declare one major but then go into a field that is completely different than what they studied at school. My biggest takeaway from this course is to know that it’s okay to not have all the answers.

Our rigorous quantitative assessment measures reinforce these personal reflections. For example, after taking INTER-LS 210 in Fall 2015:

- 93% of students felt confident that they could “describe your personal brand to a potential employer today”
- 91% of students agreed that they “understand the skills the liberal arts degree can provide”
- 90% of students reported that having a professional UW Career Mentor available in their class was valuable
- 86% of students reported that having Alumni Mentors visit their class was valuable
82% of students reported that the class changed the way they viewed their college education.

These direct reports from our students signal that SuccessWorks is a valuable tool for them as they build their career narratives. We hope you’ll agree.

**A liberal education = career training**

In the end, our learning goals point to the fact that SuccessWorks isn’t really just about careers; it’s about life as a student in and out of the classroom, at UW-Madison and beyond, pursuing something called a liberal education which turns out to be the best career training of them all.

That term “liberal education” can cause some confusion; the “liberal” in this case doesn’t at all refer to the political partisan divide between, say, “liberals” and “conservatives.” Instead, “liberal” here means something closer to its Latin root: “a ‘liberal’ education was to be liberating, requiring freedom to study and aiming at freedom through understanding.” (Roth 2014, p. 3) As CNN journalist Fareed Zakaria (2015) put it, “A liberal education gives us a greater capacity to be good workers, but it will also give us the capacity to be good partners, friends, parents, and citizens.”

UW-Madison history and geography professor William Cronon (1998) explains the concept this way: “liberally educated people have been liberated by their education to explore and fulfill the promise of their own highest talents.” Such people share some important qualities, according to Cronon: “They listen and they hear. They read and they understand. They can talk with anyone. They can write clearly and persuasively and movingly. They can solve a wide variety of puzzles and problems. They respect rigor not so much for its own sake but as a way of seeking truth. They practice humility, tolerance, and self-criticism. They understand how to get things done in the world.” And “They nurture and empower the people around them.” In other words, students who follow the path of a liberal education never stop learning, even after they leave college.

So in much of what follows, we’re not going to talk about internships, or jobs, or even careers at all. We’re going to talk about your time here at university,
why you’re here, and what we at UW-Madison have to offer you over these few intensive years. It’s a crucial chapter in your career narrative.

You might think that some of the things you do here (like visiting SuccessWorks, or completing your major classes) are indeed relevant to the future world of work you will enter after college, but that many of the other things you do here (like your general education requirements, your electives, or your extracurricular activities) are not all that relevant to your eventual career.

However, I believe that way of thinking is exactly backward. Everything you do that you think is “career oriented” is actually also helping you build a sense of deep knowledge, specific accomplishment, and professional ethics that will allow you to be an engaged and empathetic friend, consumer, citizen, and community member outside of the workplace. And everything you do that you think is “unrelated” to careers is actually helping you build the critical thinking skills, complex communication ability, and breadth of understanding that will help you stand out in hiring, promotion, entrepreneurship, and leadership all through your working life.

**Using this guide**

This student guide is intended to be used as part of a SuccessWorks career course to complement the lecture, discussions, assignments, web site, and readings. But you may also use this guide as a stand-alone resource for helping you think through your individual career development process.

The rest of this guide is broken into nine main sections which speak to the learning goals above:

- **Chapter 2:** Recognizing the workplace value of a liberal education. At a public research university like UW-Madison, especially within our College of Letters and Science, the kind of education you receive combines a broad exposure to a diversity of disciplines with a deep understanding of one specific “way of knowing the world” through your major. This chapter demonstrates that such a “liberal education” is the best preparation for the ever-changing, global world of work that you will enter after college.

- **Chapter 3:** Understanding career theories and concepts. The techniques and advice for career building that you will learn in this course are based on over a century of social science research on career counseling, human resources management, and positive psychology. This chapter introduces the basic ideas from this research which underpin our course.

- **Chapter 4:** Making time for critical reflection. This chapter covers the process of critical reflection — intentionally and systematically exploring your past experiences, your current strengths, and your future goals —
which you’ll find yourself returning to again and again as your career develops in unexpected ways after college.

- **Chapter 5: Going beyond your major.** This chapter suggests ways of understanding your chosen major department or discipline — and ways of complementing that major with other “high impact learning” activities that are part of what we call the “Wisconsin Experience” at UW-Madison.

- **Chapter 6: Developing your social network.** In an environment of ubiquitous digital communications, we often assume that social networking is equivalent to using online media technologies and services. But as this chapter describes, social networking is about building community, branding yourself, and building a positive and trustworthy reputation by giving to others as much as you receive back.

- **Chapter 7: Researching workplaces and career communities.** Digital social networking tools are essential to any basic research you might do on possible work opportunities or career paths. But successful job-seekers and career-builders also engage in personal social networking, like conducting informational interviewing or taking short-term service, research, or internship experiences.

- **Chapter 8: Communicating your value.** Eventually it all comes down to communication: curating a visible and intriguing online presence, developing a readable and compelling résumé, articulating your enthusiasm in a succinct cover letter, and conveying your value in person in a two-minute spoken introduction. This chapter covers best practices for communicating your experiences, strengths, and goals as you conduct job searches again and again throughout your career.

- **Chapter 9: Supporting diversity, inclusion, and creativity.** While we all live in an exciting global, multicultural, and pluralistic world, we unfortunately don’t live in a perfect society. But we know that increasing diversity, when done with care, generates more creativity and greater success. How do we realize this goal? This chapter takes an honest and direct look at some of the stereotypes and exclusionary practices that may affect your career, especially in terms of gender, race/ethnicity, and socioeconomic status. By learning how to identify and address issues like implicit bias and occupational segregation, you can help make the workplace into a better place.

- **Chapter 10: Planning for happenstance.** We conclude with a chapter that pulls the course together to remind you that your career story — which is only now just beginning — will no doubt be more surprising than you can ever imagine. (Just like your college education will continue to be.)

Ready to start writing your career narrative? Let’s go!
1. What is the L&S SuccessWorks center and where is it located?

2. What is a “career narrative” and why is it useful to develop one?

3. What are the six phases of the L&S “career journey” and why are they important?

4. Why might it be good to have a broad “circle of support” as you build your career narrative?

5. What is a “liberal education” and how does it connect to career preparation?
READ MORE ABOUT IT

Katherine Brooks, *You Majored in What? Mapping Your Path from Chaos to Career* (New York: Plume, 2009). This contemporary job-hunting guide is targeted to liberal education college students to help them translate their academic experiences into lifelong career goals.


Louis Menand, "Live and learn: Why we have college," *The New Yorker* (June 06, 2011). A good, rather brief essay on the history and purposes of higher education in America.

Michael S. Roth, *Beyond the University: Why Liberal Education Matters* (New Haven, CT: Yale Univ. Press, 2014). An interesting history of the various definitions, critiques, and defenses of liberal university education over the last 100 years.


Recognizing the workplace value of a liberal education

“Why are you in college?”

We begin by asking students that deceptively simple question because it is important to unpack the power that assumptions about careers can exert on a student’s trajectory through their general education requirements, their major, and their electives during their time at UW-Madison.

Today, whether in the daily news or in popular culture, the value of college is being questioned across the media. Some point to rising costs of tuition (and declining state subsidies) to argue that college is no longer worth the price. Others point to the availability of free and accessible online skills instruction — from do-it-yourself videos on YouTube to the new phenomenon of massive, open, online courses or “MOOCs” — as evidence that the era of instructor-guided, classroom education is over. And some, citing examples like
Facebook’s Mark Zuckerberg or Microsoft’s Bill Gates, argue that in a networked digital economy, only those who leave college to become entrepreneurs will truly succeed. So why go to college indeed?

**Five great reasons to attend college**

The first answer a student might give to this question could be “because that’s what is expected of me.” In 1980, just under half of all high school graduates attended college; by 2010, though, 68% of all high school graduates, or 2.2 million students, were enrolled in college (Menand 2011). As a result, today about one-third of all individuals aged 25-34 hold a Bachelor's degree or higher (Baum et al. 2013).

![Education level of individuals aged 25-34](image)

(Baum et al. 2013)
The second answer a student might come up with is “I am in college because that’s the only way to get a good job.” As education journalist Jeffrey Selingo described in the *New York Times* (2016), this is a relatively new development in US history: “The 1970s marked the last full decade when a large slice of the population didn’t need a college degree for financial success.” Today, roughly one-third of all jobs tracked by the US Bureau of Labor Statistics (2013) require some education beyond high school, and about 18% require a Bachelor’s degree.

Especially after the Great Recession which began in 2008, the value of college to improve one’s chances of finding and keeping a job has been much-discussed in the media. Employment consulting firms argue that there is a wide credentials gap, or a difference between the credentials that job-seekers have and the credentials that employers want. In other words, if
employers want to hire people with college degrees, but there aren’t enough of those degree-holders available on the market, then that keeps wages for degree-holders high, in a classic supply vs. demand relationship.

According to employment consulting firm Burning Glass Technologies (2014), “Increasingly, employers are seeking baccalaureate talent for what have historically been sub-baccalaureate jobs.” This seems to indicate that employers value college degrees for jobs more than ever, either because of upskilling (jobs becoming so complex that they now require college degrees) or upcredentialing (employers becoming more selective and wanting to hire college-educated employees whether or not the job demands those skills). In fact, as of 2016, “For the first time, workers with a Bachelor’s degree or higher make up a larger proportion of the workforce (36%) than workers with a high school diploma or less (34%)” (Carnevale 2016).

All of this feeds an important statistic for college graduates: an unemployment rate that is much lower (that is, better) than the unemployment rate of their peers who lack a college degree — and much, much lower (better) than the unemployment rate of those who lack a high school diploma. This often comes as a surprise to the general public. In 2016 the New York Times and Google surveyed roughly 1,000 Americans to ask them what they thought the unemployment rate for college graduates between the ages of 25 and 34 was. Most estimated the unemployment rate for college graduates to be between 20% and 30%! The real answer? Only 2.1% — which was about five percentage points lower than the unemployment rate for peers who lacked a four-year college degree (Bui 2016-06-03). In fact, according to a recent Georgetown University study, out of the 11.6 million new jobs that were created since the Great Recession of 2008 ended, “11.5 million of those went to individuals with at least some college education” (Carnevale 2016).
But as the economic crisis which began in 2008 finally ebbs and unemployment rates fall closer to normal levels, college students might reply with a third answer: that they are here not simply to get a job, but “to earn more money than I could without a college degree.” That would be a reasonable assumption. Back in the early 1980s, according to Selingo (2016), the **college wage premium**, or “how much more a typical bachelor’s degree recipient earns compared to a high school graduate,” was 42 percent. But today, according to the Center on Education and the Workforce at Georgetown University, a full-time, full-year worker with a Bachelor’s degree can expect to earn around 84% more income over a lifetime than a worker who has only a high school diploma (Carnevale 2011; Fogg et al 2012).

**college wage premium**

How much more money a typical college graduate earns over lifetime of work compared to a typical high school graduate (currently estimated to be 84%).
Harvard professor Louis Menand outlined two possible explanations for this college wage premium in a 2011 *New Yorker* article. The first possible reason, the **meritocracy hypothesis**, suggests that college simply helps society to efficiently identify productive human resources: “An intelligent person is open-minded, an outside-the-box thinker, an effective communicator, is prudent, self-critical, consistent, and so on. These are not qualities readily subject to measurement.” Thus perhaps “College is, essentially, a four-year intelligence test.” But Menand’s second possible reason for the college wage premium, the **socialization hypothesis**, suggests that college enables one’s learning and personal development in a way that provides value across different occupations and industries: “College exposes future citizens to material that enlightens and empowers them, whatever careers they end up choosing.” (Menand 2011)
Earnings aren’t the only attraction of a job, of course; what one does can matter as much, if not more, as how much one gets paid. So a fourth reasonable answer to why one is in college could be to find not just a job, but an occupation, a profession, or a career — some coherent (but adaptable) long-term work pursuit from which one can derive satisfaction, pleasure, or even the sense of a calling. For some, finding a fulfilling career means “doing what you love”; for others, it is “doing good work in the world.”
Researchers consistently find that certain experiences and behaviors in college correlate well with this kind of workplace satisfaction or engagement. For example, according to a 2014 Gallup survey, employees were more likely to be engaged in their work if they had pursued an internship, were active in extracurricular activities, or even worked on a semester-long project while in college (Gallup 2014).
Finally, a fifth answer to “why are you in college?” that might not come to mind initially is that college helps one not only in their narrow labor market aspirations — getting a job that is secure, pays well, and seems meaningful — but in their whole lives, as voting citizens, as careful consumers, and as caring family and community members.
To put it another way, the positive economic, intellectual, and social outcomes for college-educated students themselves have important spin-off benefits for everyone else in their communities as well.

## The college labor market today

All of these desired career outcomes — low unemployment, high salaries, meaningful work, and a resulting enhanced quality of life — differ for students who complete college versus students who do not. In fact, these differences lead scholars to conceptualize the mix of possible jobs, occupations, and careers for college graduates as a distinct arena with its own characteristics and dynamics: a college labor market made up of “professional, technical, managerial, and high-level sales jobs that employ a large share of college graduates.” (Fogg et al. 2012)

Social scientists have developed and debated many different theories about how such labor markets work — with some emphasizing individual factors that confer power to individual employees for improving their own chances of success in

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### Benefits of higher education to both the individual and the community

<table>
<thead>
<tr>
<th>Public</th>
<th>Private</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Tax Revenues</td>
<td>Higher Salaries and Benefits</td>
</tr>
<tr>
<td>Greater Productivity</td>
<td>Employment</td>
</tr>
<tr>
<td>Increased Consumption</td>
<td>Higher Savings Levels</td>
</tr>
<tr>
<td>Increased Workforce Flexibility</td>
<td>Improved Working Conditions</td>
</tr>
<tr>
<td>Decreased Reliance on Government</td>
<td>Personal/Professional Mobility</td>
</tr>
<tr>
<td>Financial Support</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Economic</th>
<th>Social</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduced Crime Rates</td>
<td>Improved Health/Life Expectancy</td>
</tr>
<tr>
<td>Increased Charitable Giving/</td>
<td>Improved Quality of Life for Offspring</td>
</tr>
<tr>
<td>Community Service</td>
<td>Better Consumer Decision Making</td>
</tr>
<tr>
<td>Increased Quality of Civic Life</td>
<td>Increased Personal Status</td>
</tr>
<tr>
<td>Social Cohesion/Appreciation of</td>
<td>More Hobbies, Leisure Activities</td>
</tr>
<tr>
<td>Diversity</td>
<td></td>
</tr>
<tr>
<td>Improved Ability to Adapt to and</td>
<td></td>
</tr>
<tr>
<td>Use Technology</td>
<td></td>
</tr>
</tbody>
</table>

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**college labor market**

Professional, technical, managerial, and other high-level jobs, in both for-profit and non-profit organizations, that require a college degree.
the labor market (referred to as **agency**), and others emphasizing contextual factors that channel or restrict how much individuals can affect their chances of labor market success (referred to as **structure**). In most formulations, both of these have a role — people exert agency according to their strengths, accomplishments, and goals, but they do so within overall structures of society that they cannot themselves easily change or control. But which side of this relationship that you choose to emphasize is critical.

For example, in **human capital theory**, agency is thought to be the most important factor: individuals are assumed to be rational, active, and powerful agents of their own fortunes who consciously invest in increasing their education and skills (in other words, their stock of “human capital”) in order to make themselves attractive for the highest-status jobs, almost regardless of structural conditions. On the other hand, in **segmentation theory**, the structural characteristics of the labor market are so polarized (“segmented” into opposites) that different rules might operate simultaneously for different social groups and different kinds of organizations, depending whether one is in the privileged “core” of high-wage and secure careers or on the disadvantaged “periphery” of low-wage and intermittent labor (Maranda et al. 2000).

These theories and others were all developed at different times in response to different historical conditions of the global economy. After World War II, the US enjoyed great economic prosperity through the 1950s-1960s, with relatively protected markets and generous social benefits, inspiring an agency-focused human capital theory — the idea that if one worked hard to acquire basic skills and education, one could find a secure, life-long place in a booming economy. But later, the economic restructuring of the 1980s and 1990s, when many manufacturing regions and employees had to quickly adjust to greater global competition and a shrinking social safety net, inspired a more structure-focused segmentation theory — the idea that hard work and basic skills were not necessarily enough to secure success when good jobs might vanish from your industry or your hometown overnight (Maranda et al. 2000).

Today, it is important to understand the current economic conditions that might be affecting the college labor market for the next round of university graduates. Economists Frank Levy and Richard Murnane (2004) have focused on the **information economy** — the gradual connection of all forms of economic activity to networked digital computation and communication infrastructures, both to coordinate work over time and space and to minimize the need for human labor — as the
The result of these and other economic changes has been what Levy and Murnane (2004) call the **hollowing out** of the occupational structure, much along the lines of segmentation theory: “As computers have helped channel economic growth, two quite different types of jobs have increased in number, jobs that pay very different wages. Jobs held by the working poor — janitors, cafeteria workers, security guards — have grown in relative importance. But the greater job growth has taken place in the upper part of the pay distribution — managers, doctors, lawyers, engineers, teachers, technicians.”
Three facts about these latter jobs stand out: they pay well, they require extensive skills, and most people in these jobs rely on computers to increase their productivity.” (Levy & Murnane 2004)

Now we can start to see what the college labor market really means in a global, networked information society experiencing this kind of hollowing out of opportunity. The skills that will be in demand are, to put it simply, “anything humans still do better than robots” (Tankersley 2013). In particular, college labor markets will demand employees who can demonstrate “expert thinking” and “complex communication.”

---

**Expert thinking** might be defined as “solving problems for which there are no rule-based solutions.” For example: “diagnosing the illness of a patient whose symptoms seem strange, creating a good tasting dish from the ingredients that are fresh in the market that morning, repairing an auto that does not run well but that the computer diagnostics indicate has no problem.” Similarly, **complex communication** might be defined as “conveying not just information but a particular interpretation of information.” For example: “a manager motivating the people whose work she supervises, a biology
teacher explaining how cells divide, an engineer describing why a new design for a DVD player is an advance over previous designs” (Levy & Murnane 2004).

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**Average annual earnings for occupations at different skill levels**

<table>
<thead>
<tr>
<th>Skill and Level</th>
<th>Examples of Occupations</th>
<th>Average Annual Earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complex Problem Solving</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very High</td>
<td>foresters, economists, sales managers</td>
<td>$80,276</td>
</tr>
<tr>
<td>Medium</td>
<td>chefs and head cooks, radiation therapists, roofers</td>
<td>$41,671</td>
</tr>
<tr>
<td>Very Low</td>
<td>floral designers, file clerks, cashiers</td>
<td>$23,393</td>
</tr>
<tr>
<td>Critical Thinking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very High</td>
<td>judicial law clerks, microbiologists, logisticians</td>
<td>$77,882</td>
</tr>
<tr>
<td>Medium</td>
<td>upholsterers, insurance sales agents, tellers</td>
<td>$35,661</td>
</tr>
<tr>
<td>Very Low</td>
<td>models, floor sanders and finishers, bartenders</td>
<td>$23,914</td>
</tr>
<tr>
<td>Management of Financial Resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very High</td>
<td>lodging managers, civil engineers, curators</td>
<td>$64,519</td>
</tr>
<tr>
<td>Medium</td>
<td>athletic trainers, motorboat operators, concierges</td>
<td>$34,881</td>
</tr>
<tr>
<td>Very Low</td>
<td>photographers, court reporters, telemarketers</td>
<td>$27,596</td>
</tr>
<tr>
<td>Negotiating</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very High</td>
<td>lawyers, marketing managers, instructional coordinators</td>
<td>$60,148</td>
</tr>
<tr>
<td>Medium</td>
<td>optometrists, budget analysts, new accounts clerks</td>
<td>$39,478</td>
</tr>
<tr>
<td>Very Low</td>
<td>paperhangers, biological technicians, pharmacy aides</td>
<td>$26,749</td>
</tr>
<tr>
<td>Reading Comprehension</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very High</td>
<td>surgeons, editors, mental health counselors</td>
<td>$82,452</td>
</tr>
<tr>
<td>Medium</td>
<td>art directors, broadcast technicians, commercial pilots</td>
<td>$35,491</td>
</tr>
<tr>
<td>Very Low</td>
<td>parking lot attendants, funeral attendants, shampooers</td>
<td>$23,307</td>
</tr>
<tr>
<td>Social Perceptiveness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very High</td>
<td>physician assistants, fashion designers, credit counselors</td>
<td>$67,627</td>
</tr>
<tr>
<td>Medium</td>
<td>flight attendants, surveyors, technical writers</td>
<td>$37,151</td>
</tr>
<tr>
<td>Very Low</td>
<td>etchers and engravers, tire builders, file clerks</td>
<td>$26,376</td>
</tr>
</tbody>
</table>

*Source: O*NET database, release 16.0; May 2010 Occupational Employment Statistics survey. Tabulations produced by the authors.


One thing that unites both of these skills of expert thinking and complex communication is something called **metacognition**, or “the act of thinking about how one is thinking.” Metacognition is “the ability to step back to consider how a current problem-solving strategy is performing, and to switch to an alternative strategy when the initial strategy no longer seems
promising,” according to Levy and Murnane (2004). This is something that computers simply cannot do — and an area in which, according to Richard Langlois (2003), well-educated humans still have a **cognitive comparative advantage** over algorithms and machines.

But there’s another aspect to the human cognitive comparative advantage as well. As *New York Times* columnist David Brooks put it (2015), we should ask “What are the activities that we humans, driven by our deepest nature or by the realities of daily life, will simply insist be performed by other humans?” His answer: “Those tasks are mostly relational. Being in a position of authority or accountability. Being a caregiver. Being part of a team. Transactional jobs are declining but relational jobs are expanding. Empathy becomes a more important workplace skill, the ability to sense what another human being is feeling or thinking.” Some researchers refer to this as **social intelligence**, crucial for tasks “involving negotiation, persuasion and care,” which are key to “most management, business, and finance occupations” and “most occupations in education, healthcare, as well as arts and media jobs.” (Frey & Osborne 2013)

In other words, both critical thinking and complex communication need to function within a profound understanding of the **human condition**: an awareness of both the diversity of human cultures and the universality of human experience, drawn from careful and deep study of the arts, humanities, natural/physical sciences, and social sciences.

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**the human condition**

A broad term meant to suggest the (somewhat paradoxical) diversity of human cultures coupled with the universality of human experience. At UW-Madison we explore these questions of “what it means to be human” through careful and deep study of the arts, humanities, natural/physical sciences, and social sciences.

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**A liberal education in the college labor market**

So regardless of the theory of labor markets that you might subscribe to, if there is any room for agency at all, the recent structural changes in the global information economy should motivate college students to pay attention to the key skills of the college labor market: the cognitive comparative advantage of broad skills like expert thinking and complex communication, set within a deep understanding of the human condition. But this is good news for students at UW-Madison, because these skills are the core products of a liberal education.

Consider first the fact that the economy and all of its aspects — technological conditions, global markets, and cultural demands — are constantly in motion.
A liberal education ensures that what you learn now remains useful beyond just your first job: “given the difficulty of predicting which skills will be in demand even five years from now, not to mention in a lifetime, your best career preparation is one that emphasizes broad skills (for example, social, communication, analytical, logical, leadership, human relations), intellectual curiosity, and knowledge of how to learn” (Ballard 2002, 186). Such an education, where you “learn how to learn,” is necessary not only for survival in a changing economy, but for innovation and entrepreneurship: “Employees who value learning will read more about the field in which they are working, will attend and present at conferences, will develop new ideas, and will create value for their employers throughout their careers” (Brooks 2009, 83). We see this clearly in the data on new jobs that have been created since the Great Recession of 2008: college graduates gained 8.4 million new jobs in the last eight years of recovery, or roughly 100 times more new jobs than those with only a high school education or less.
Such benefits accrue regardless of the major you might pursue — as long as you make sure to complement the “depth” of your major study with the “breadth” of your general education requirements, electives, and other pursuits like certificates or extracurricular activities. No matter what you end up choosing for your major, you are learning not only knowledge about a particular subject, but also metaknowledge about the process of learning itself: “knowledge that teaches you a framework for thinking about a situation” (Brooks 2009, 88).

You may wonder, however, whether employers understand the value of a liberal education in the same way that college professors do. In 2013 the American Association of Colleges and Universities (AAC&U) explored that very question in a survey of 318 executives who employed college graduates in both for-profit and non-profit organizations. The findings were clear: “93% of employers say that a demonstrated capacity to think critically, communicate clearly, and solve complex problems is more important than a candidate’s undergraduate major,” and “80% of employers agree that, regardless of their major, all college students should acquire broad knowledge in the liberal arts and sciences” (AAC&U 2013).

### Employer ratings of candidate skills (5-point scale)

<table>
<thead>
<tr>
<th>Skill/Quality</th>
<th>Weighted Average Rating*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Ability to verbally communicate with persons inside and outside the organization</td>
<td>4.63</td>
</tr>
<tr>
<td>2. Ability to work in a team structure</td>
<td>4.62</td>
</tr>
<tr>
<td>3. Ability to make decisions and solve problems</td>
<td>4.49</td>
</tr>
<tr>
<td>4. Ability to plan, organize and prioritize work</td>
<td>4.41</td>
</tr>
<tr>
<td>5. Ability to obtain and process information</td>
<td>4.34</td>
</tr>
<tr>
<td>6. Ability to analyze quantitative data</td>
<td>4.21</td>
</tr>
<tr>
<td>7. Technical knowledge related to the job</td>
<td>3.99</td>
</tr>
<tr>
<td>8. Proficiency with computer software programs</td>
<td>3.86</td>
</tr>
<tr>
<td>9. Ability to create and/or edit written reports</td>
<td>3.60</td>
</tr>
<tr>
<td>10. Ability to sell or influence others</td>
<td>3.55</td>
</tr>
</tbody>
</table>

National Association of Colleges and Employers (2016)
But even if employers value such liberal education outcomes, are students receiving those benefits from their college educations? Sociologists Richard Arum and Josipa Roksa asked that question in their recent book *Academically Adrift* (2011). Using the results of a general knowledge test called the Collegiate Learning Assessment, given to 2,000 college students first during their freshman year and then again two years later, they found that “students majoring in liberal-arts fields — sciences, social sciences, and arts and humanities — do better on the C.L.A., and show greater improvement, than students majoring in non-liberal-arts fields such as business, education and social work, communications, engineering and computer science, and health” (Menand 2011).

This broad training that liberal arts students receive serves them well throughout their whole careers — not just in their first job out of college. Studies of average earnings demonstrate this. While students graduating from professional and preprofessional programs might earn a little bit more on average in their first job out of college, by the time they reach peak earning potential in their lives, humanities, social sciences, and sciences students have demonstrated greater earning power. These students demonstrate an ability to adapt, successfully, to an ever-changing world of work (AAC&U 2013).

### Liberal arts and sciences majors close earnings gaps with professional majors

<table>
<thead>
<tr>
<th></th>
<th>Directly Out of College (Ages 21–25)</th>
<th>Peak Earning Ages (56–60)</th>
<th>$86,550</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities and Social Sciences</td>
<td>$26,271</td>
<td>$66,185</td>
<td></td>
</tr>
<tr>
<td>Professional and Preprofessional</td>
<td>$31,183</td>
<td>$64,149</td>
<td></td>
</tr>
<tr>
<td>Physical Sciences, Natural Sciences, and Mathematics</td>
<td>$25,986</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

AAC&U (2013)
Here at UW-Madison, the liberal arts and sciences college education that we provide largely functions as these overall statistics would indicate: in a survey of graduates from the 2012-2013 academic year, 71% reported that they were working after college, and another 24% reported that they were pursuing graduate school. Even better, 100% of respondents reported significant learning gains on the key measures of a liberal arts and sciences education, all part of the Essential Learning Outcomes we specify for a college degree -- things like knowing about the diversity of human cultures, understanding the physical and natural world, thinking critically and creatively to solve problems, working in teams and being able to communicate ideas, and taking personal and social responsibility for your actions.
What this means is that UW-Madison students are well positioned to build the so-called **T-shaped hiring profile** that employers tell us they want — combining a breadth of cosmopolitan experience across many different areas (the top of the “T”) with a demonstrated depth of knowledge and expertise in one particular area (the pedestal of the “T”). The head of IBM’s university partnerships and recruiting area, Jim Spohrer, says that the alternative, an “I-shaped” employee who simply has specific knowledge of one area, is too “career limiting” at IBM: “Those adept in only one subject don’t cut it in this modern work environment” (Selingo 2015). In fact, according to a recent

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**Knowledge of Human Cultures and the Physical and Natural World**
- Through study in the sciences and mathematics, social sciences, humanities, histories, languages, and the arts

**Personal and Social Responsibility**
- Civic knowledge and engagement—local and global
- Intercultural knowledge and competence
- Ethical reasoning and action
- Foundations and skills for lifelong learning

**Focused by engagement with big questions, both contemporary and enduring**

**Integrative Learning**
- Synthesis and advanced accomplishment across general and specialized studies

**Intellectual and Practical Skills**
- Inquiry and analysis
- Critical and creative thinking
- Written and oral communication
- Quantitative literacy
- Information, media, and technology literacy
- Teamwork and problem solving

**Anchored through active involvement with diverse communities and real-world challenges**

**Practice extensively across the curriculum in the context of progressively more challenging problems, projects, and standards for performance**
report by the consulting group Education Advisory Board (2016), “Employers like IBM are experimenting with ways to scan and code an applicant’s resume to assess her T-score. A study abroad experience, for example, may indicate cultural sensitivity, while a leadership role in a student organization may demonstrate management ability.”

**The T-Shaped hiring profile**

Professor Philip Gardner of the Collegiate Employment Research Institute at Michigan State University described the “T-shaped” professional this way: “It's a person who comes through and gets depth in a disciplinary knowledge, where they pick up their problem-solving skills and a lot of information driven by discipline. Then they also become truly interdisciplinary in being able to talk with other majors by picking up these other skills that are broad skills — project management, cultural awareness, critical thinking—which require you to cross multiple boundaries.” (Carlson 2017)
Hopefully this discussion has convinced you that you are well positioned to build a T-shaped hiring profile of your own as a UW-Madison student -- as long as you work hard and pay attention to your choices along the way. And we hope this chapter also helped to remind you why you chose to attend college in the first place — and how your career, no matter what your major, will benefit from this choice. In the next chapter we'll explore how a broad and deep liberal arts and sciences education connects to different theories and concepts of how careers work in the modern world.
1. What is the “college labor market” and what makes it desirable?

2. How do you think your economic success is influenced both by your own “agency” in seeking education and skills, and also by the underlying “structure” of the global economy?

3. What is the “information economy” and what kinds of skills are important in this kind of employment?

4. What are the “Essential Learning Outcomes” of a UW-Madison education and how do they relate to career prospects?

5. What is a “T-Shaped” hiring profile and why is it in demand by employers?
READ MORE ABOUT IT


3 Understanding career theories and concepts

“What is a career?”

Before we consider the kinds of career choices that might serve you well, both in the college labor market and in rest of your life as a consumer, citizen, and community member, we should know just what we mean by the term “career.”

The definition of this term is difficult precisely because “career” is an object of interest in so many different social science fields: “From psychological notions of how dispositional differences affect job adaptation, to sociological interpretations of role behavior in organizational settings, to economic views on how human capital accrues through education and experience” according to one expert (Arthur et al. 1989).
At the very least, we should probably define career as having something to do with an individual’s relationship to work over time; but beyond this minimal requirement, there are several strikingly different metaphors we could invoke in order to understand the idea of a career:

- **Career as “fit.”** This metaphor imagines career choice as a puzzle-solving or solution-finding exercise, where the qualities of a person must be carefully ascertained in order to slot that person into one of the many different careers available within a given society. This matching metaphor suggests that the qualities of person and career are ultimately knowable, relatively fixed, and instrumentally achievable through the proper application of some sort of systematic method. And the implicit value assumption is that there is only one best career outcome for which a person should strive (Pryor & Bright 2011).

- **Career as “identity.”** This metaphor focuses not so much on choosing the perfect career, but on building a positive self-conception within whichever career one finds themselves in. In his book *The Mind at Work* (2004), Mark Rose invokes this idea of career when he reminds us, “most working men and women try to find meaning in what they do — through the activity of the work itself or through what their wages make possible outside of the workplace. This effort is testament to a remarkable strength of mind. People work within constraint — sometimes the inhumane control of the assembly line or the ‘electronic sweatshop’ — yet seek some expression of self, some agency, some small way of saying I am here.”

- **Career as “journey.”** This spatial metaphor for one’s career is one of the most commonplace: people choose “career paths,” seek the “fast track,” climb the “career ladder,” or suffer on the “career plateau” (Inkson 2002). (Even L&S SuccessWorks uses this metaphor, as we saw in chapter 1!) A journey might imply positive values like discovery, serendipity, and progress. But it might also involve negative values like getting lost, getting stuck, or never getting there at all.

- **Career as “resource.”** The career is a source of individual power within this metaphor, in the same way that workers themselves are conceptualized as powerful “human resources” within the modern corporation. According to Pryor and Bright (2011), “Essentially, the ‘career’ is a building block or an ingredient in the construction of wealth” — so the goal is to maximize and stabilize that career resource as soon as possible.

- **Career as “calling.”** Finally, there is a long philosophical and theological tradition which considers career to be an expression of one’s destiny, one’s best capacity for doing good in the world, and one’s best hope for bringing about self-actualization.

These five metaphors for the idea of “career” aren’t mutually exclusive, of course. But they have each emerged in different measures during different
historical moments, as various actors from public education, private business, and academic research have developed different career-related practices and theories over the last century or so.

Even though careers can be considered from different perspectives, it might seem that career planning must be a straightforward process. One counselor describes it this way: “Career planning is the developmental, systematic process of (1) learning about yourself (for example, your interests, abilities, and values); (2) identifying occupations that correspond to your assessment of self; (3) exploring the occupations that you are considering; (4) selecting an occupation to pursue; (5) readying yourself for the job search process (résumé and application letter writing, job interview skill development, job finding techniques and strategy knowledge); and (6) securing satisfying employment” (Ballard 2002). (Again, these steps should remind you of the L&S SuccessWorks career journey from chapter 1.)

But hidden behind this apparently simple formula are quite a few normative (or value-laden) questions: What aspects of one’s self are most important for career choices? What aspects of occupations are most important? And if the goal is “securing satisfying employment,” then who decides what that even means — employment that is economically satisfying to the public? Functionally satisfying to the employer? Or personally and even existentially satisfying to the worker?

Throughout the social, economic and technological changes of the twentieth century — changes which have structured what kind of work is available, how it is valued, and who is expected to perform it — there have arisen several key theories about careers that answered these normative questions in different ways. It is worthwhile reviewing this history to understand the choices about career planning that we are weaving into our course.

**Psychometric focus: Frank Parsons**

Much of modern career counseling practice dates back to the turn of the twentieth century — especially the Progressive Era of social activism in the US, with its concerns about population change through rapid immigration and urbanization, economic change through new technologies of oil- and electricity-powered industrialization, and efforts to manage such changes through the newly-emerging authority of the engineering and social sciences disciplines (Collin & Young 2000).

Frank Parsons (1854-1908) was a former railroad engineer and engineering professor who lived during this period, and who came to believe near the end of his life that, especially for young and poor urban workers, “self-understanding in combination with knowledge of the world of work would result in sound career decision-making” (McMahon 2014).
The approach that Parsons developed, outlined in his posthumously-published book *Choosing a Vocation* (1909) and put into practice at the Vocation Bureau in Boston, came to be known as the “trait and factor” method: “First, he stressed, a clear understanding of the individual’s aptitudes, interests and limitations was necessary. Second, a knowledge of the requirements and conditions of different kinds of employment was essential. Finally, an ability to match these two would result in successful guidance” (Gothard 2001).

Such an approach fit into the then-new social science practice of psychometrics, or “the scientific study of human behavior through measurement” (Buckingham & Clifton 2001). Unfortunately, some of the “science” behind Parsons’s own studies verged on quackery: “He wanted to know not only your personal ambitions, strengths and weaknesses, but also how often you bathed and whether you slept with the window open” according to one critic. Parsons even used the pseudoscience of phrenology — with its overtly racist assumptions about human potential based on physiological traits — in his counseling work (Krznaric 2012, p. 44).
Even setting aside the profound prejudices and limitations surrounding its origins, it is important to remember that this kind of matching ideal was not only meant to benefit career-seeking individuals; it was also meant to benefit the new type of large-scale, national-scope, bureaucratic and technological organization which desired a precise division of labor at a minimum cost of wages and turnover (Betz et al. 1989). In normative terms, the Parsons understanding of “career” meant an efficient, productive, and permanent job match for both worker and employer.
Personality focus: John Holland

Roughly half a century passed before the next major career counseling theory took hold — this one firmly rooted in the mid-century trends of psychology (Herr 1996). Rather than matching instrumental “traits” of people and “factors” of jobs, academic psychologist John Holland (1919-2008) looked more deeply at the overall personality types of job seekers, and the holistic work environments of different careers, arguing that “vocational satisfaction, stability, and achievement depend on the congruence between one’s personality and the environment in which one works” (Betz et al 1989).

Holland’s typology of personality types and work environments is summarized under what became known as the Holland hexagon. This model categorized individuals in one of six personality types: (1) realistic (related to outdoor and technical interests); (2) investigative (intellectual, scientific); (3) artistic (creative, expressive in literary, artistic, musical, or other areas); (4) social (interest in working with people); (5) enterprising (interest in persuasion, leadership); and (6) conventional (enjoyment of detail, computational activity, high degree of structure) (Betz et al 1989).

Holland believed “each is a model orientation based on coping mechanisms, psychological needs and motives, self-concepts, life history, vocational and educational goals, preferred occupational roles, aptitudes and intelligence” (Gothard 2001).

Importantly, rather than in the Parsonian “trait and factor” approach, where an outside expert scored a worker’s traits using a supposedly objective set of measures, the instruments that Holland developed allowed workers to self-
report various aspects of their skills and preferences which would then reveal their personality type (Pryor & Bright 2011). However, once a person’s position on the hexagon was revealed by this self-reporting, their personality type was still tightly connected to various kinds of suggested careers:

Not only has Holland’s work been the basis of many practical career-counseling instruments since the 1950s, it was also the first body of career theory to be questioned and tested through decades of academic social scientific study (Herr 1996). And in normative terms, Holland’s hopes for “career” meant fulfilling, enjoyable work for each worker, and a coherent, particular style to each workplace. For these reasons, it has been widely influential for decades within career and vocational counseling.
O*NET Interest Profiler using Holland’s “Hexagon”

You can explore Holland’s model yourself with a free, online career test that is available at the US Department of Labor “O*NET” site. It’s called the “Interest Profiler” and it is at [http://www.mynextmove.org/explore/ip](http://www.mynextmove.org/explore/ip).

Developmental focus: Donald Super

Around the same time that Holland was expanding on the “trait and factor” work of Parsons by focusing on broader personality types and work environments, another scholar was extending the study of careers to consider not just the crisis moment of young adults seeking their first waged jobs, but the unfolding of career concerns over whole worker lifetimes. Psychologist Donald E. Super (1910-1994) expressed this developmental theory in *The Psychology of Careers* (1957): “individuals, as socialized organizers of their own experiences, choose occupations that allow them to function in a role consistent with a self-concept, and that the latter conception is a function of their developmental history” (Herr 1996).

Super’s original model was expressed visually in what came to be known as a career rainbow of five life stages — growth (age 0-14); exploration (15-24); establishment (24-44); maintenance (44-64); and decline (65+) — conducted...
within the environments of home, community, education and work (Gothard 2001). In this way, “Super is usually credited with shifting the focus of counselors and researchers alike away from ‘occupations’ to the concept of ‘career’” (Pryor & Bright 2011).

Donald Super’s “career rainbow” of life stages

Like Holland’s “hexagon,” Super’s “rainbow” has been the subject of extended social science study; for example, “the Career Pattern Study, a longitudinal study of more than 100 men from the time they were in ninth grade until they were well into adulthood” (Herr 1996). In normative terms, Super’s ideas cast “career” as a lifetime of gradual, progressive development of responsibility and reward.

**Constructivist focus: Mark Savickas**

Holland’s and Super’s work — the “hexagon” of personality types and the “rainbow” of developmental stages — have grounded career counseling theory and practice for most of the latter half of the twentieth century. But starting in the 1970s and 1980s — especially with the changes in the globalization of the economy, the application of information technology to work, and the promotion of neoliberal political goals which reduced social benefits and safety nets — workers found themselves facing increased global competition for labor, demands for greater flexibility in employment arrangements, renewed threats of replacement by automation, and an environment of more
uncertainty in what were once assumed to be stable industries and career paths. At the same time, social science theories began to consider the ways that people, despite similarities in personality types, developmental stages, and environmental circumstances, could construct radically different meanings out of their work lives depending on their goals and values.

It was in this context that health sciences professor Mark Savickas urged career counselors to move “from scores to stories,” where “emphasis is placed on individuals’ ability to construct their own careers by taking action to adapt themselves and what matters to them to the transitions of career development such as from education to work, from occupation to occupation, from work to non-work and from one job to another job. Thus career development is a process of progressive self-definition as individuals grow, develop, respond and change as they encounter the challenges of living and working” (Pryor & Bright 2011). In other words, Savickas argued that workers should not simply be tested and told where they fall in a personality or developmental schema, but instead they should be granted great power to define and redefine themselves as active, adaptable actors within their own career narratives (Brott 2011). The normative implications are clear: Careers do not simply unfold, but rather, they are constructed by individuals by “imposing meaning on their vocational behavior and occupational experiences” (McMahon 2014).
Positive focus: Donald Clifton

The assessment tool that we use for this course, StrengthsFinder, has connections to all of these theories. While at the root it may seem like a simple “trait and factor” tool, it attempts to draw lessons from more complicated and more developmental understandings of both persons and workplaces just as the “Holland hexagon” and the “Super rainbow” do. And using the StrengthsFinder tool to reframe and grow one’s own career story, much as the constructivist theories argue, is encouraged. But unlike all of these theories, the StrengthsFinder is just as much rooted in norms of business success as it is in norms of employee satisfaction.

Donald Clifton’s mass-market StrengthsFinder book

Donald Clifton (1924-2003) was a professor of educational psychology at the University of Nebraska-Lincoln in the 1950s, during the same period that Holland and Super were first developing, publishing, and testing their career theories. But Clifton took a detour from academia to found a management consulting firm, Selection Research Inc., which grew so successful that by 1988 it had acquired the Gallup market research organization. It was in this context that StrengthsFinder developed, as Gallup explored “how can you create an entire organization where at least 45 percent of your employees [...] strongly agree that they are using their strengths every day?” (Buckingham & Clifton 2001).
For roughly thirty years, Clifton’s organization explored this question through various consulting contracts with private businesses, to eventually settle on the present-day StrengthsFinder assessment (Hodges & Clifton 2004). According to two advocates of the approach, “Clifton and his team of researchers at the Gallup Organization interviewed thousands of professionals with the aim of identifying the themes of talent that differentiated the top performers from the rest. Strengths were developed from one’s innate talents, they argued, through the application of knowledge and skill” (Linley & Harrington 2006).

The management advice that Gallup provided to human resources professionals was thus simple: building upon employee strengths mattered more than remedying employee weaknesses. “Since the greatest room for each person’s growth is in the areas of his greatest strength, you should focus your training time and money on educating him about his strengths and figuring out ways to build on these strengths rather than on remedially trying to plug his ‘skill gaps’” (Buckingham & Clifton 2001). This emphasis on steady self-improvement through the cultivation of core strengths is echoed across the management literature as a desirable quality of new employees. As Google executive Eric Schmidt put it, the tech world appreciates when “you believe the qualities that define you can be modified and cultivated through effort.” (Schmidt et al 2014, 103)

This attitude is what psychologist Carol Dweck has termed “the growth mindset.” Here is how she explains it in her recent book (2006, p. 7):

This growth mindset is based on the belief that your basic qualities are things you can cultivate through your efforts, your strategies, and help from others. Although people may differ in every which way—in their initial talents and aptitudes, interests, or temperaments—everyone can change and grow through application and experience.

Do people with this mindset believe that anyone can be anything, that anyone with proper motivation or education can become Einstein or Beethoven? No, but they believe that a person’s true potential is unknown (and unknowable); that it’s impossible to foresee what can be accomplished with years of passion, toil, and training.

According to Dweck’s research, avoiding the “fixed mindset” — “believing that your qualities are carved in stone” — actually allows us to better estimate, and thus improve, our own levels of performance and ability (Dweck 2006). As she points out, “In the fixed mindset, everything is about the outcome. If you fail—or if you’re not the best—it’s all been wasted. The growth mindset allows people to value what they’re doing regardless of the outcome. They’re tackling problems, charting new courses, working on important issues.” (And that
sounds a lot like a student who is taking full advantage of their college education.)

Differences between a fixed mindset and a growth mindset

As a result, they may plateau early and achieve less than their full potential.

As a result, they reach ever-higher levels of achievement.

(Dweck 2016)
A self-administered test like StrengthsFinder is most valuable if you’re willing to put yourself into this kind of growth mindset. Advocates of the test argue that it is meant to “help individuals form a language of success on which they are able to articulate what they do well” (Hodges & Clifton 2004; Buckingham & Clifton 2001). The strengths that result from this language are assumed to be not only “enduring and unique” (Buckingham & Clifton 2001) but also necessary to existential fulfillment: “Using our strengths comes naturally to us. We yearn to use our strengths, we feel fulfilled when we use our strengths, and we achieve our goals efficiently and effectively when we use our strengths” (Linley & Harrington 2006).

<table>
<thead>
<tr>
<th>StrengthsFinder sample strengths</th>
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<tbody>
<tr>
<td>Achiever*</td>
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<tr>
<td>People especially talented in the Achiever theme have a great deal of stamina and work hard. They take great satisfaction from being busy and productive.</td>
</tr>
<tr>
<td>Activator*</td>
</tr>
<tr>
<td>People especially talented in the Activator theme can make things happen by turning thoughts into action. Once a decision is made, they want to act quickly.</td>
</tr>
<tr>
<td>Adaptability*</td>
</tr>
<tr>
<td>People especially talented in the Adaptability theme prefer to “go with the flow.” They tend to be “now” people who take things as they come and discover the future one day at a time.</td>
</tr>
<tr>
<td>Analytical*</td>
</tr>
<tr>
<td>People especially talented in the Analytical theme search for reasons and causes. They have the ability to think about all the factors that might affect a situation.</td>
</tr>
<tr>
<td>Arranger*</td>
</tr>
<tr>
<td>People especially talented in the Arranger theme can organize, but they also have a flexibility that complements this ability. They like to figure out how all of the pieces and resources can be arranged for maximum productivity.</td>
</tr>
</tbody>
</table>

In this way the StrengthsFinder tool relates back to social science research by fitting into a recent movement toward positive psychology, or “the scientific study of optimal human functioning” (Hodges & Clifton 2004). Often said to have started with a 1998 speech by American Psychological Association president Martin E.P. Seligman, positive psychology was defined in contrast to mainstream (clinical) psychology, which allegedly “gives priority to negative behavior and various forms of dysfunctions” (Linley & Harrington 2006; Jorgensen & Nafstad 2004). Instead, its supporters argue, “Positive psychology takes as its starting point the individual as a socially and morally motivated being” (Jorgensen & Nafstad 2004). Thus the normative concept of a career under the “strengths” paradigm argues that both employee career success and organizational market success are better served when individual strengths are discovered, cultivated, and utilized as much as possible.
Critiquing the career development theories

One thing that should be apparent from this short overview of the history of career counseling theory is that there is still no discipline-wide agreement about the best path to career success — or even what such success would mean. Recent special issues of the *Journal of Vocational Behavior* (2001) and the *Journal of Career Assessment* (2011) demonstrate that the “big questions” are still under debate (McMahon 2014). Scholars in the field say that “existing career theories should be seen as complementary ways of knowing, not competing and fully developed alternative explanations of the same behavioral set or population” (Herr 1996).

One reason for this lack of consensus is that key blind spots still exist, despite decades of interdisciplinary study of career conceptions and career outcomes. For example, too many theories and interventions assume the experience of an idealized white, male, middle-class employee as “normal”: “A pervasive trend in critiques of career psychology relates to a perception that it is a Western white middle-class discipline that does not cater well to women and minority groups and may not translate well across countries and cultures” (McMahon 2014). The instruments developed to inventory skills, personality traits, and strengths of job-seekers might suffer from test bias where the language or examples presented on the test unintentionally hold different meanings for different social groups, affecting the results that the test provides (Worthington et al 2005). The efficiencies of university research are also part of the problem: “samples of convenience — for example, sophomore students in Psychology 102 getting extra credit for participating in a study — are inadequate to understand the problems of school leavers, non-college-bound populations, immigrant populations, persons of color, and women who are not college students” (Herr 1996). Not only might the resulting career theories and instruments not apply in the same way across diverse populations, but their uncritical use might help reinforce or even reproduce negative stereotypes about those populations in the first place (Worthington et al 2005). (We’ll explore the issues of stereotypes in the workplace and in the career search in more detail in chapter 9.)

Another critique of these theories is that no matter how broadly they might be based, they are biased toward finding a single solution to the problem of “career” that might in fact not really be solvable once and for all. In her intriguing book *How to be Everything*, Emily Wapnick (2017) argues that “The message that we must decide on a single identity is reinforced in many contexts. Mainstream career books and guidance counselors give us tests to help us whittle down our career options to the perfect fit. Colleges and universities ask us to declare a major. Employers sometimes ask applicants to explain ourselves when we possess skills in outside fields, implying we lack focus or ability. [...] A specialized life is portrayed as the only path to success, and it’s highly romanticized in our culture.” What if, Wapnick wonders, many of us are actually complicated (and perhaps a bit contradictory) bundles of
many different strengths, interests, and creative callings, who have the potential to pursue multiple and diverse careers over the course of our lives — what she terms a **multipotentialite**?

These critiques remind us that career circumstances for all of us are constantly changing — especially as technological development and global competition both continue to unfold — and so our career theories must adapt to explain these new realities. As one recent scholar of career counseling and career psychology advises, if “both individuals and the labor market have changed radically and are now too fluid for assessment and information variables to remain stable over time,” then perhaps “Career assessments and career information should be used as one source of information, among other sources, to help individuals construct their perceptions of themselves and their opportunities in an informed and careful way within their social context” (Sampson 2009).

In other words: Use these and other career-assessment tools with caution and care, recognizing their inherent and inevitable limitations. In the next chapter we’ll explore the practice of “critical reflection,” which you can use to set your results from any of these career assessments into a broader context that takes into account the whole of your experiences, your accomplishments, and your goals for the future.
REVIEW QUESTIONS

1. What are some of the different metaphors one might use to understand the meaning of a “career”? How do these different metaphors relate to different career exploration strategies?

2. What are the origins of today’s theories about vocational and career counseling? What ideas from those origins persist today, and what ideas have fallen away over time?

3. What is the “Holland hexagon” and how is it used in career advising?

4. What does the phrase “from scores to stories” mean in the history of career advising techniques?

5. What theories and research results support the use of a “strengths based” approach to career guidance?

6. What are some of the most important critiques of past (and current) career development theories?
**READ MORE ABOUT IT**

Kim S. Cameron, Jane E. Dutton, and Robert E. Quinn, eds., *Positive Organizational Scholarship* (San Francisco: Berrett-Koehler, 2003). Talks about the historical origins of the StrengthsFinder quiz, and covers some of the research that has been done to test and validate this approach.


Roman Krznaric, *How to Find Fulfilling Work* (New York: Picador, 2012). This short essay on career values, masquerading as a how-to guide, considers five types of meaning on the job: earning money, achieving status, making a difference, following passions, and using talents.


“Know thyself.”

It’s an aphorism you’ve probably heard more than once — not surprising, since scholars date it from the time of ancient Greece and Egypt (appearing as it does in numerous Socratic dialogues written by Plato). But as we saw in chapter 3 on career concepts and theories, knowing yourself — especially knowing your possible place in the modern global economy — is not necessarily easy. Yet employers know that such insight is essential: In one Northwestern University study, 500 employers who were surveyed about job applicant behaviors reported that one of the top weaknesses of applicants was “not knowing themselves” (Schilling 2014).

As we described in chapter 1, such an understanding is the first step to building a career narrative: a cohesive story of how your previous accomplishments and your future goals work together to illuminate your most productive current career options. In this chapter we’ll explore several
different techniques for **critical reflection** — taking time out for intentional, structured, careful thought about where you’ve been and where you’re going, both in your academic and professional pursuits — that students have found useful in narrowing down different career paths (or even paths through their liberal education).

## Using critical reflection to build identity capital

The idea of critical reflection as a valuable part of an active, goal-directed education dates back to philosopher and psychologist John Dewey, who spoke of what he called “reflexive practice” in the early part of the twentieth century as “active, persistent, and careful consideration of any belief or supposed form of knowledge” (Stingu 2012; Hickson 2011). Decades later, in the 1980s, scholar Donald Schön popularized the notion of critical reflection as a way to uncover and analyze the tacit and often unacknowledged skills that artists and counselors bring to their work — knowledge that is not easily codified as “technical rationality” but which is nevertheless crucial to doing their jobs (Schön 1983; Thompson et al 2008). Educator Jack Mezirow brought the concept full circle back to Dewey by arguing that critical reflection led to the kind of open-minded self-awareness necessary for truly transformative learning: “recognizing that we are not infallible, that we will make mistakes from time to time,” and thus can benefit from a bit of humility and empathy for others (Thompson et al 2008, p. 158).

While critical reflection may take many forms — “through a discussion with [a] supervisor or peer, by writing in a journal, or by expressing [...] thoughts and feelings creatively through poetry, song, story, painting or dance” — the point is always to combine an understanding of your own experiences with an understanding of the context around you (Hickson 2011). The hardest part about critical reflection is that, by definition, one must try to “surface” things which are normally hidden because we make assumptions about them or don’t think about them as important (Thompson et al 2008). Reflection without that kind of critical thinking is merely descriptive, not analytic. In other words, critical reflection asks us to do something very “meta”: to think about our thinking (we identified this as **metacognition** in chapter 2).

Critical reflection takes time and effort — but investing that time and effort in yourself pays dividends. In fact, social scientists use a metaphor from economics to describe how people can accumulate a resource called **identity capital** over the course of their lives as they practice critical reflection and build their career narrative (Warin 2015). Sociologist James Côté (2005)
defined identity capital as “attributes associated with sets of psychosocial skills, largely cognitive in nature, that appear to be necessary for people to intelligently strategize and make decisions affecting their life courses,” especially under changing global economic conditions — things like “self-esteem and a sense of purpose in life,” for example. Others have extended this idea of identity capital as a key resource in building a career, blending in with the older notion of “human capital” (job-related education and skills) that we discussed in chapter 2. As author Meg Jay puts it, “Identity capital is our collection of personal assets. It is the repertoire of individual resources that we assemble over time. These are the investments we make in ourselves, the things we do well enough, or long enough, that they become a part of who we are. Some identity capital goes on a resume, such as degrees, jobs, test scores, and clubs. Other identity capital is more personal, such as how we speak, where we are from, how we solve problems, how we look.” But in any case, “identity capital is what we bring to the adult marketplace. It is the currency we use to metaphorically purchase jobs and relationships and other things we want.” (Jay 2012, 6-7)

According to one liberal arts college career adviser, using critical reflection to begin building identity capital is the crucial first step in any career search: “Making the transition from academics to the work world does not begin with writing a résumé, buying a new suit, or getting that first job interview. It begins with thought, research, and goal setting” (Ballard 2002, p. 185). For example, here are three questions that students are asked to reflect on as their first assignment in the SuccessWorks INTER-LS 210 course:

1. How will your current path at UW will connect to your future career?
2. What you think will be the most challenging aspect of your career search?
3. What do you hope to get out of this course?

The rest of this chapter will introduce some tools for this kind of academic-and career-oriented critical reflection.

**Visual concept mapping**

You’ve had a great deal of experiences already that will no doubt feed into your career choices throughout your lifetime. But bringing order to these experiences — and writing a compelling story about them — can be difficult.
Career counselor and education scholar Katharine Brooks (2009) has developed an effective visual and cognitive exercise to help students bring narrative coherence to the “wanderings” they have experienced throughout their lives. Using a plain 8.5 x 11-inch piece of paper, Brooks instructs students to make a simple diagram of “all the interesting and significant things you’ve done or have happened to you”:

Go back as far in your life as you wish. If a significant event occurred at age five, include it. Have you had unique jobs or taken unusual classes? Did you have a memorable summer experience? What are you most proud of in your life? Do you have hobbies you’ve pursued for a while? What awards or honors have you received during your life? Can you think of a particularly valuable lesson you've learned? What knowledge do you rely on that you have developed from your experiences or education? What successful experiences can you recall?

After making this basic diagram, Brooks asks students to start connecting the items with lines representing useful categories, like jobs, classes, sports, accomplishments, places, whatever.
After simply chunking into “categories” she asks students to move to reflecting on “themes”:

Do you see a thread that follows you from elementary school through college? Is there a pattern to the types of jobs you’ve held? What might some of your seemingly disparate experiences have in common?

Finally, Brooks suggests showing the resulting wanderings map to a friend, classmate, parent, counselor, professor, or other trusted adviser in order to get some outside feedback. This is a great opportunity to talk through your wandering map and see if you can start to tell the story of where your “career” has been so far — and where it’s going.
Personal profile quizzes

A second reflective tool is a sort of individual “audit” through a short online questionnaire. (You’ve probably done a number of these in middle school and high school.) As we saw in chapter 3 on career concepts and theories, these kinds of instruments date back more than a century to the beginnings of vocational psychology; however, these days we don’t assume that any single objective test can possibly give you the single, definitive “correct” answer to what kind of career you should pursue. Rather, these kinds of instruments should be used to inspire and facilitate your ongoing critical reflections about what your strengths, interests, and goals are as you move through your college curriculum and your career.

Here are some examples of the different types of personal profile quizzes that you might encounter (some of which are available through SuccessWorks):

- **Personality-based quizzes.** For more than a century, the idea that one’s core personality should match one’s choice of lifetime career has held a powerful attraction, both for job-seekers hoping to find work that they would both enjoy and excel at, and for employers hoping to find workers who would be both content and productive in their roles. Much of this research hinges on an assumption that any given individual can be classified into one of a small number of universal personality types — and that such a personality will remain both consistent across diverse social situations and persistent over one’s adult lifetime. Two of the most popular concepts developed to try to relate personality to occupation that you are likely to encounter are the Myers-Briggs Type Indicator (MBTI) and the Big Five personality theory.

The **Myers-Briggs** personality inventory, loosely based on theories by psychologist Carl Jung published in 1921, posits four different dimensions of human personality: “how we interact with the world and where we direct our energy; the kind of information we naturally notice; how we make decisions; and whether we prefer to live in a more structured way (making decisions) or in a more spontaneous way (taking in information)” (Tieger et al 2014). Developed in the 1940s by Isabel Myers (and inspired by ideas from her mother Katharine Briggs), it first began to reach a wide audience of college guidance counselors when the Educational Testing Service purchased it in 1962 as a research tool. By the early 1970s, the test had caught the attention of a University of Florida psychologist who teamed up with Myers to launch a research and consulting firm based on the indicator. Today the instrument still exists largely outside of mainstream psychology, promoted through a nonprofit foundation run by one of Myers’s children. However, the MBTI remains influential in corporate employment testing, according to one journalist who has studied its history: “The prominent consulting firm McKinsey & Company, for example, has made the test an
integral part of its operations; McKinsey ‘associates’ often know their colleagues' four-letter MBTI types by heart” (Paul 2006, p. 118-121).

Here’s a quick description of each dimension in the Myers-Briggs indicator (Tieger et al 2014):

- **Extraversion / Introversion** (E/I): Each of us has a natural preference for either the outer or inner world, although by necessity we all function in both. Functioning in our preferred world energizes us; functioning in the opposite world is more difficult and can be tiring. We call those who prefer the outer world Extraverts and those who prefer the inner world Introverts.

- **Sensing / Intuition** (S/N): People who prefer Sensing [...] concentrate on what can be seen, heard, felt, smelled, or tasted. They trust whatever can be measured or documented and focus on what is real and concrete. [...] Some people are more interested in meanings, relationships, and possibilities based on facts than in the facts themselves. You could say these people trust their ‘sixth sense’ (Intuition) more than their other five.

- **Thinking / Feeling** (T/F): Thinkers prefer decisions that make sense logically. They pride themselves on their ability to be objective and analytical in the decision-making process. [...] Feelers make decisions based on how much they care or what they feel is right. They pride themselves on their ability to be empathetic and compassionate.

- **Judging / Perceiving** (J/P): People with a preference for Judging [...] tend to live in an orderly way and are happiest when their lives are structured and matters are settled. [...] Judgers seek to regulate and control life. People with a preference for Perceiving [...] like to live in a spontaneous way and are happiest when their lives are flexible. [...] Perceivers seek to understand life rather than control it.

When using the MBTI, a person determines which preference they hold for each dimension, which results in classifying each person in one of sixteen possible categories of personality type:
Sixteen possible Myers-Briggs personality categories

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<thead>
<tr>
<th>ISTJ</th>
<th>ISFJ</th>
<th>INFJ</th>
<th>INTJ</th>
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<tr>
<td>ISTP</td>
<td>ISFP</td>
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<td>ESTP</td>
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<td>ESTJ</td>
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You can probably already see from these brief descriptions how your MBTI category might be linked to various career preferences and strengths. For example, the official Myers & Briggs Foundation (http://www.myersbriggs.org) suggests, “A person with a preference for Introversion may find he or she is happier doing research, while a person who prefers Extraversion may favor a field with more interaction with people.”

While the Myers-Briggs scheme is perhaps the most popularly-known personality categorization tool out there, it remains outside of the mainstream of both psychology and business administration research. In these areas, a different theory of personality categorization has recently gained interest: the concept of a universal **Big Five** set of personality traits. Like the MBTI, the idea of the Big Five is that individuals can be quickly sorted into various personality categories through a relatively brief quiz, and that these categories will remain relatively stable across a lifetime of personal development through different social situations and roles. However, the origins of the Big Five lie not in Jungian psychoanalytic theory, but in a lexical (dictionary and vocabulary) analysis of the various terms and concepts that different cultures have used to describe personalities throughout history. As one journalist describes the idea, “if an important aspect of personality exists, people will have invented a word for it. The more significant a quality is, the more synonyms our language will offer to describe it. If a characteristic is less vital, words referring to it will be fewer, will be used less often, and may even drop out of the vernacular altogether” (Paul 2016).

This idea, which dates to the 1880s, has waxed and waned in popularity as the field of psychology has developed over the past century and a half. In the 1930s, one psychologist identified about 4,500 English-language words
describing personality; in the 1940s, another psychologist classified those words into sixteen distinct personality factors and began to build measurement instruments (self-quizzes) for them. But by the 1980s, University of Oregon psychologist Lewis Goldberg narrowed this number even further, noting that the same five factors seemed to keep cropping up in research studies again and again: “There was Extroversion, the inclination to actively reach out to others. Neuroticism, the disposition to feel negative emotions. Agreeableness, the tendency to be good-natured and cooperative. Conscientiousness, the propensity to be organized and goal oriented. And Openness, the proclivity to be imaginative and curious.” The most well-known instrument to test for Big Five traits, called the “NEO PI-R,” was designed by psychologists Paul Costa Jr. and Robert McCrae and “appears to be the test of choice for psychologists conducting personality-related research” (Paul 2016).

To try one of these personality assessments yourself, consult the expert career advisers at the Career Exploration Center or L&S SuccessWorks, since knowing how to interpret the results of these instruments is important. (If you simply want to get a flavor of these tests, you might try the free web sites http://www.outofservice.com/bigfive/ for a Big Five personality test example, or http://www.16personalities.com/ which is largely based on the MBTI.)

- **Character-based quizzes.** One of the problems with personality tests — and the theories behind them — is the question of how much agency this allows people to choose careers in which they might succeed. Other “matching” schemes attempt to determine not what kinds of innate personality someone might possess, but what kinds of chosen values a person might hold. The Values in Action Inventory (VIA) claims to help students identify “five signature character strengths valued across cultures as elements of a well-lived life” through a free online test (Schreiner 2013). The idea that “a fulfilling life results from identifying one's signature strengths of character and using them as much as possible on a regular basis” comes from University of Pennsylvania psychologist Martin Seligman, popularized in his 2002 book Authentic Happiness. In a recent article, Seligman and his colleagues describe the difference between their VIA character-based instrument and the MBTI personality-based instrument: “Introversion and extraversion, for example, are traits with no obvious moral weight. Kindness and teamwork in contrast are morally valued, which is why they are considered character strengths” (Peterson et al 2010). Like the lexical origins of the Big Five personality traits, the VIA test was based, in part, on a reading of historically influential religious and philosophical texts across the globe — “the books of Exodus and Proverbs in the case of Judaism, the Analects in the case of Confucianism, and so on” — to find character strengths that were not only repeatedly valued across different cultures, but also measurable in some empirical way by positive
psychology researchers (Peterson et al 2010). Their results are broken into six categories:

(1) wisdom and knowledge (creativity, curiosity, open-mindedness, love of learning, perspective); (2) courage (bravery, honesty, perseverance, zest); (3) humanity (kindness, love, social intelligence); (4) justice (fairness, leadership, teamwork); (5) temperance (forgiveness, modesty, prudence, self-regulation); and (6) transcendence (appreciation of beauty, gratitude, hope, humor, spirituality).

After developing this list, the team used an online survey to sample over 7,000 currently employed adult respondents. Their main finding was that "across occupations, character strengths of curiosity, zest, hope, gratitude, and spirituality were associated with work satisfaction" (Peterson et al 2010). To take this assessment yourself and learn more about it, consult L&S SuccessWorks or try the free web site http://www.viacharacter.org

- **Strengths-based quizzes.** As discussed in chapter 3, the Clifton StrengthsFinder tool is a product of the Gallup corporation (developed through decades of management consulting work) and is based on the principles of positive psychology. The INTER-LS 210 course uses a required textbook that both gives access to the online StrengthsFinder quiz, and provides detailed description of each strength that the quiz identifies — especially how those strengths might connect to career trajectories. Strengths-based assessments reinforce the theory of education that “every student can learn under the proper conditions of appropriate challenge and support” (Schreiner 2013, p. 106). But remember: Strengths aren’t simply innate characteristics that inevitably lead to success; they are at most predispositions that can be developed by students into tools for success, but only with sustained hard work, peer support, and expert guidance (Schreiner 2013). You can find out more from the Gallup web site http://www.strengthsquest.com

Of course, none of these instruments are designed to be all-encompassing, and all of them continue to be the subject of study and debate among practitioners. For example, the MBTI has been criticized for low “test-retest reliability,” with concerns that “if you retake the test after only a five-week gap, there is around a 50 per cent chance that you will fall into a different personality category compared to the first time you took the test” (Krznaric 2012). This is related to another concern about the MTBI: that rather than falling into the extremes of easily-discernable personality categories, most people probably fall in the middle of the scale, with the test randomly classifying them on one or the other side of the spectrum. Finally, some critics of the MBTI, especially because of its origins outside of mainstream, empirical psychological research, suspect that there is a large “Barnum Effect” involved in its results — in other words, as showman P.T. Barnum said about
the big top and sideshow spectacle of the circus, people flock to it simply because it has “a little something for everybody” (Paul 2006).

While the Big Five personality scheme has more support among academic psychology and business administration researchers, it too has been critiqued in similar ways as the MBTI. For example, researchers question whether individuals respond to personality quizzes honestly, or whether they simply report what they think the testers want to hear (especially if those quizzes are used for employment screening). One study argued, “as many as 88 percent of job applicants actually hired after taking the NEO PI-R had intentionally raised their Conscientiousness score” in order to be more attractive as potential employees (Paul 2006). But even if such quizzes can provide useful information about individuals, argues Northwestern University psychologist Dan McAdams, they fail to do anything more than scratch the surface of one’s true and complex identity: “How would the Big Five classify a man who is usually passive, McAdams asks, but becomes pugnacious when directly challenged? How would it label a woman who is customarily reserved, but turns talkative when she’s nervous? What would it do with a person who is generally unemotional, but who falls apart when offered sincere sympathy? Just as we don’t really know a new acquaintance until we’re versed in such subtleties, McAdams suggests, psychologists can’t know a subject until they look past the static Big Five” (Paul 2006).

Such concerns should remind us that it is perfectly OK to disagree with the results you receive from any of these personality, character, or strengths quizzes. In fact, the surprise you might feel at the way a particular set of quiz results characterizes you can provide a great motivation for further critical reflection: write down and explain why you disagree with the results, in a way that would help you explain your preferred career trajectory to a peer, an adviser, or a potential employer. And even if these tools do seem to give you useful feedback, think about whether they are providing information that helps you tell a consistent “career story,” or whether they point to surprising differences that might be worth exploring through the kinds of activities discussed next in chapter 5 (especially hands-on internship, research, or service experiences).

For more online self-assessment tools, you might explore O*NET, the U.S. Department of Labor career exploration and job analysis site, at http://www.online.onetcenter.org

**Challenge-Action-Result statements**

In job interviews, research shows that employers want to hear how candidates have met specific educational or workplace challenges, using the unique and powerful skills they have gained through both education and experience, to achieve positive results. A powerful technique in preparing for such an
interview is the Challenge-Action-Result (CAR) reflection. In this exercise, students work through a list of possible skills for a particular job or career and then try to come up with at least one succinct **CAR statement** for each, in the following format:

- **Challenge**: Describe a specific situation or task that you needed to accomplish or resolve, whether through school or a job, or even something that you simply decided to pursue on your own.

- **Action**: Describe the specific steps you took to address the challenge, demonstrating how you mobilized your skills, education, or strengths.

- **Result**: Describe the positive outcome and how your employer, class, or even you benefited by your actions. Use numbers to quantify your results and show how your work impacted your grade, your organization’s revenue, or your community.

Here is an example of a CAR statement:

| **Challenge**: Office needed to convert from one database to another. |
| **Action**: Accurately entered over 200 records into an Access database. |
| **Result**: More efficiently tracked client outcomes for new sales leads. |

CAR statements should speak directly to skills that employers value, in a language they understand. Some career advisers call these skills **salable success factors**, arguing that “The assumption that past performance predicts future performance is used extensively by the best-trained interviewers” (Schilling 2014).
When composing CAR statements about your salable success factors, you should always try to quantify your results with numbers, action verbs, and proper nouns. How long was your role? How many goals did you score? How many people were involved? How much money was raised? How many hours a week? How many customers did you assist? How long was your research paper? Be as specific as you can.

For example, “I contributed to raising money to fight cancer” doesn’t tell the employer anything. However, if you tell the employer “I contributed 10 hours to the Walkathon to Fight Cancer. I registered 200-300 people on race day.”
Behind the scenes, I prepared nearly 500 race packs and recruited four volunteers,” then the employer has actual evidence that you’re comfortable dealing with plenty of strangers, that you’re willing to put your head down and work without recognition, that you cared about this event, and that you sought to involve others.

One reason that such specific CAR statements are so important is because many top employers are increasingly using a new interview strategy called **competency-based interviewing**: structured interviews that “use behavioral questions to help the interviewer assess candidates based on critical competencies identified for the position.” This kind of interviewing is meant to replace “think on your feet” interview questions which might demonstrate how a candidate reacts to stress, but do not supply any information on how the candidate would actually perform in a particular work role. In other words, “managers are taught to ask candidates behavioral questions, based on the theory that past behavior is the best predictor of future behavior. [...] The managers are then asked to assess how competent the candidate is in several critical areas” (Kessler 2006).

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**A question from a competency-based interview script**

<table>
<thead>
<tr>
<th>Results and Performance Driven</th>
<th>Key Examples</th>
</tr>
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| Goal oriented; remains persistent when obstacles are encountered; encourages others to be accountable for their actions; relentless focused and committed to customer service; thinks creatively. | □ Flawless execution—Holds self, direct reports, and others accountable for seamless and compliant execution of tasks and projects.  
□ Accepts stretch goals—Eagerly embraces stretch goals; measures achievements through metrics.  
□ Customer centric thinking—Makes the customer the center for all decisions to build value; imposes customer focus on others and challenges them to exceed customer expectations. |

**Planned Behavioral Questions**

1. Describe an instance when you were particularly effective at achieving end results. What steps did you take to achieve these results?
2. Think of an example when you consistently exceeded internal or external customer expectations. How did you do this? What approach did you use?
3. Provide an example of a project or team you managed in which there were many obstacles to overcome. What did you do to address those obstacles?
4. Tell me about an example of what you have done to obtain information to better understand a customer. What did you do? How did this information improve your customer service?
5. It is not always easy to achieve required work goals or objectives. Describe a stretch goal or objective that you were able to achieve. Why was this a stretch goal? What was the result?

Kessler (2006)
Good CAR statements will help you to supply direct, succinct answers in a competency-based interview. For example, you might try to develop CAR statements for each of the following ten competencies that employers report seeking most often:

1. Ability to work in a team structure
2. Ability to make decisions and solve problems
3. Ability to plan, organize, and prioritize work
4. Ability to verbally communicate inside and outside the organization
5. Ability to obtain and process information
6. Ability to analyze quantitative data
7. Technical knowledge related to the job
8. Proficiency with computer software programs
9. Ability to create and/or edit written reports
10. Ability to sell or influence others

In reflecting on how you’d demonstrate these skills, the “Challenge” doesn’t have to be a crisis, or even a problem. A lot of students immediately comb their memories for those negative situations, and when they can’t recall one, the resulting CAR statement is sort of flimsy and personally meaningless. Consider any kind of task, goal, objective, situation, job, or class that pushed you to act. You probably even have examples of your strengths buried in seemingly unexceptional events.

A lifetime of critical reflection and the 75/25 rule

The tools for visual concept mapping, personal profile quizzing, and CAR statements described in this chapter are only a few of the many reflective activities that students might find valuable in their career search — and in their academic work in general. For example, many courses in the liberal arts and sciences include “reading response” or “reflection journal” assignments where students write reactions, ideas, and questions about what they are working on in class on a regular basis, revisiting these at the end as study
guides and learning assessment tools. Often these classes will ask students to post at least some of these reflections online, to build a small community of peers that read and consider each others’ reflections, enlarging each of their own perspectives on the course material (Thompson et al 2008). You can do this in your career search as well. In fact, as the next chapter will discuss, posting ideas and questions to online social networks (either individually or as part of a group discussion) is a great way to bring your reflections to a like-minded audience.

Another tool students might find useful is the seven stories process, described in the book So what are you going to do with that? by Susan Basalla and Baggie Debelius (2015):

Write down twenty enjoyable accomplishments from any time in your life. Include anything you enjoyed doing that you also did well. You can mix childhood memories with recent events, and big professional moments with trivial victories. Anything goes. It may take you a day or two to come up with your list of twenty. Then pick out the seven stories that speak to you most strongly: the ones that were the most satisfying, the most characteristic of who you think you are.

Next, write a paragraph about each of the seven accomplishments, describing what you did well and how it made you feel. Note the skills that you demonstrated in each circumstance. As you go through the stories, you'll notice remarkable overlap between them. The qualities that you've always taken for granted will most likely turn out to be qualities that lead to your greatest successes. We often don't give ourselves credit for certain skills because they've always just been part of who we are.

Finally, you can start to see how those skills add up to a personality profile by asking yourself a few questions on the basis of these stories: What kind of environment do I thrive in? What kind of projects do I like to work on? Which skills do I enjoy using most? When am I most proud of myself?”

The seven stories method points to an important outcome of any reflection exercise: imagining your best possible self or your best possible future. As described by professional academic advisers, “This step is not primarily about career planning or major selection, but about the kind of person a student wants to become” and “those aspects of oneself that one most wants to embody in the future” (Schreiner 2013, p. 110). To imagine your best possible self, you might consider reflecting on the following questions:

- What do you see yourself doing as a result of being a college graduate that you cannot do now?
- How would you describe the person you want to become? What is that person like? What is that person able to do? What kind of relationships does that person have?

- What will it take for you to grow toward becoming that person?

Psychological research has suggested that “visualizing one's best possible self leads to more positive emotions and higher levels of motivation” (Schreiner 2013).

No matter what kind of tool you use for critical reflection as you develop your career story, remember to make regular time for this activity, because it is only through reflecting on what you do — and why you do it — that you can articulate for others the importance of your experiences, skills and goals. As the authors of one recent college career guide suggested, try to follow the so-called 75/25 rule: “spending 75 percent of your time thinking and 25 percent of your time doing,” (Terhune & Hays 2013) This advice applies whether you’re trying to finish a small class assignment or trying to find your next long-term career-building step. But it takes discipline and commitment to allow yourself to stop and think: “If you are going to spend 75 percent of your time thinking and 25 percent of your time doing, you are going to have to slow down. You are going to have to take deep breaths, and you are going to have to take them regularly. You need to spend parts of every day, every week, and every month unplugged and disconnected from the rest of the world.” (Terhune & Hays 2013)

Don’t disconnect entirely though. Remember, the professionals at the Career Exploration Center (in Ingraham Hall) and L&S SuccessWorks (above the University Bookstore) are available to provide expert guidance for all of these reflection tools and more. In the next chapter, we’ll use these tools of critical reflection for one of the most important choices students face during college: picking a major.

**ONLINE RESOURCE**

Career Exploration Center  
https://cec.ccas.wisc.edu

L&S SuccessWorks  
http://careers.ls.wisc.edu/
1. What is “critical reflection” and why is it valuable in career exploration?

2. What is “visual concept mapping” and how can it help as an aid to critical reflection?

3. What are some of the risks and benefits to using personality-profile quizzes to figure out what kind of career path to pursue?

4. What are “CAR statements” and how can they be useful in résumé-building?

5. What is a “competency based interview” and how should students prepare to succeed in this kind of situation?

6. What is the “75/25 rule” and how does it connect to critical reflection?
Read More About It

Susan Basalla and Maggie Debelius, “So What Are You Going to Do with That?: Finding Careers Outside Academia, 3rd ed. (Chicago: Univ. of Chicago Press, 2015). Career guide ostensibly directed at graduate students pursuing “alt-academic” careers, but valuable for all college students as well.

Donald Clifton, Edward Anderson and Laurie Schreiner, StrengthsQuest: Discover and Develop Your Strengths in Academics, Career and Beyond (New York: Gallup Press, 2006). Original publication of Clifton’s StrengthsQuest instrument for popular audiences.

Annie Murphy Paul, The Cult of Personality Testing: How Personality Tests are leading us to Miseducate our Children, Mismanage our Companies, and Misunderstand Ourselves (New York: Free Press, 2006). More of a journalistic history of different personality testing schemes and theories than the polemic that its strident title would suggest, this book provides a good background which balances personality testing advocacy claims with numerous skeptics’ arguments.


“How should I choose my major?”

It’s a question that all college students confront — some even before they arrive on campus, and some only during their final year before graduation. When we survey students in the SuccessWorks career course, generally two-thirds have not yet formally declared their major -- in fact, among all new UW students, about one third arrive with no intended major in mind. And even those who have made a provisional choice may change their minds before they graduate — after all, among graduating UW students, only about 28% finish with the major that they intended when they started. This mirrors national trends: according to a recent UCLA survey, “By the end of their first year, a quarter of all freshmen change their mind about their field of study. Another half of first-year students say they plan to change majors,” and about 60% of all students who start out in STEM fields don’t end up getting a degree in one of those fields (Selingo 2013). This is not surprising; college students are in what sociologist Ann Swidler (2001) has called the *unsettled period* for young adults: “During this time, they are trying on different selves. Indeed, college students often switch majors, pursue seemingly contradictory goals, and reenvision their futures.”
Education researchers have found that students use a variety of simultaneous strategies to make this important choice, from reflecting on what they are interested in and what comes easily to them, to imagining what they want to do with their lives after college and what career opportunities might be available (Galotti 1999). And while studies from both 1994 and 2004 show that “genuine interest in the subject” is the main factor in major choice for around 60% of students, many students nevertheless find their major at the last minute by “backing into” a field that they have randomly earned enough credits in, after realizing that they were not interested in what they were previously pursuing (Beggs et al 2008).

At SuccessWorks, we treat choosing a major much like choosing a career path: one should be reflective about whether their interests and strengths match the major, gather information from their trusted social network about how the major works, and be able to tell the story of how all of their experiences in and out of the classroom contributed to, related with, or complemented that major. Pursuing a major is often the first opportunity that students have to delve deeply into a subject alongside lifelong experts in the material.

Northwestern University professor Andrew Roberts, author of The Thinking Student’s Guide to College (2010), put it this way: “After college your chances to pursue these fields—much less pursue them with the guidance of acknowledged and caring experts—drop considerably.” But at the same time, especially with majors among the broad liberal arts and sciences, we stress that choosing a major is not the same as choosing a career: any given major can lead to many different careers, and any given career can be accessed through many different majors. The challenge is to forge your own journey of experiences and accomplishments that can best connect your choice of major to your choice of career — and then to be able to narrate that journey to the next decision-maker who may have an opportunity for you.

A brief history of college majors

In 2015, UW-Madison, home to over 120 undergraduate majors already, introduced yet another new one: “neurobiology.” This was not unusual; across the US, between 2000-2010, the overall number of college majors increased by 20 percent (Selingo 2015). But college majors themselves are a relatively new invention, historically speaking, as a New York Times essayist recently pointed out: “Until the end of the 19th century, students took the courses that the faculty told them to take, and not only did these pretend to encompass most of what was then known, they were also intended to be good for you — to enhance your moral and spiritual development” (McGrath 2006).

Early in the twentieth century, at many universities, the college major emerged out of a combination of contemporary trends. The development of new departments, the hiring of new faculty, and the construction of new laboratories dedicated to research helped to specialize and professionalize the
academic landscape, resulting in new fields like sociology, psychology, information science and mass communication research. And fearing that universities without requirements simply produced “dilettantes” and not graduates prepared to take on professional leadership positions in an increasingly complex society, even Harvard University, long an advocate of open elective study, required students choose a major subject starting in 1910 (McGrath 2006).

Over the twentieth century, while the idea of pursuing a major has been relatively stable, the kinds of majors available and the numbers of students choosing them have shifted over time. When all college students across the country and at all different kinds of institutions are considered (two-year and four-year, small and large, for-profit and non-profit), “Over the past 40 years, the share of undergraduate degrees awarded in professional fields such as business, health, engineering, and computer science has grown dramatically, and the share of degrees awarded in the traditional liberal arts fields has declined” (Fogg et al 2012). However, when only students at four-year liberal arts or comprehensive research universities are considered, the picture is more stable: In the early 1970s, according to the National Association of Colleges and Employers, “41 percent of the degrees awarded went to students majoring in the liberal arts,” almost exactly the same percentage as in 2009 (Koc 2010). Yet even within this population of college students, there has been a shift away from some majors and towards others. For example, “The percent of graduates who majored in education fell from 21 percent in 1970-71 to just over 7 percent by 2004-05. By contrast, the proportion of graduates majoring in a business concentration grew from 13.7 percent in the early ’70s to nearly 22 percent today” (Koc 2010).

At UW-Madison, liberal arts and science majors remain popular. In fact, in recent years all five of the top majors, based on the number of degrees awarded each year, were part of the the College of Letters and Science:

- Economics (462 degrees awarded each year)
- Political Science (449)
- Biology (431 — shared with the College of Agricultural and Life Sciences)
- History (362)
- Psychology (361)

So while newer, more specialized majors will continue to come and go, students can still find value in pursuing broad majors based on disciplines that have been established for a century or more.
Choosing a major is not choosing a career

In the early 1990s, our expectations of how business, cultural, and political communication took place were overturned almost overnight by the rapid development of new “IT” (information technology) like the world wide web and the personal mobile phone. But according to the Wall Street Journal, “Only about 10% the people in IT jobs during the Silicon Valley tech boom of the 1990s, for example, had IT-related degrees” (Cappelli 2011). Even at Stanford University—a private, highly-selective research university located in the heart of California’s Silicon Valley—computer science was not the top major in the 1990s. According to business professor Randall Stross (2017), who recently published a history of Stanford interwoven with the career stories of several its recent non-techie undergraduates, “in 1995, only fifty-one students majored in CS, about the same number as in history and half the number that majored in English. With the dot-com boom in the late 1990s, the department’s enrollment grew—in the graduating class of 2001, it more than doubled to 127—but when the tech bubble burst, enrollment fell back.” Today there is indeed a boom in CS enrollments at Stanford, but Stross argues that it was largely the result of the 2008 “Great Recession”: “Finance lost its allure, and the beneficiary was computer science” (2017). We may well be shocked to learn which major becomes the next popular pursuit in the 2020s.

This is not surprising to education researchers who investigate how one’s choice of major connects to one’s eventual career. Drexel University professor Neeta Fogg and her colleagues point out, “More than one-fifth of all employed college graduates with a bachelor’s degree work in a job that is not related to their undergraduate major” (Fogg et al 2012). That percentage may even be higher, according to a recent study by economists who “used data collected in the 2010 census to look at how well college graduates’ majors matched their jobs” and found “only 27 percent of college graduates with only a bachelor’s degree were working in a job that was linked to the graduate’s major by the federal government’s classification scheme” (Stross 2017). Researchers report similar findings when they survey employers about how they make hiring decisions. According to Cornell psychology professor Robert Sternberg, a recent Chronicle of Higher Education study found that “Only 19 percent of employers seek graduates from specific majors and are unwilling to consider candidates without those majors; the majority of employers -- 78 percent -- will consider students from any major” (Sternberg 2016).

What this means is that students who graduate with one major can and do end up working in many other industries that might seem more related to other majors. For example, a study based on the 2009 American Community Survey found that “Physics majors can be found in Computer occupations (19 percent), Management occupations (19 percent), Engineering occupations (14 percent) and Sales occupations (9 percent)” and that “Liberal Arts majors are found in Management occupations (18 percent), Sales occupations (15 percent), Office occupations (14 percent), and
Education occupations (13 percent)” (Carnevale et al 2011). In fact, for many students, the first or second job that they will find with their chosen major hasn’t even been invented yet.

Sample career paths which might follow an undergraduate Psychology major

<table>
<thead>
<tr>
<th>Industrial Psychologist*</th>
<th>Organizational Psychologist*</th>
<th>Research and Development</th>
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<tbody>
<tr>
<td>Investment Banking*</td>
<td>Advertising</td>
<td>Real Estate</td>
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<tr>
<td>Human Resources</td>
<td>Broker</td>
<td>Salesperson</td>
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<tr>
<td>Financial Planner/Analyst*</td>
<td>Auditor</td>
<td>Market Researcher</td>
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<td>PR Assistant</td>
<td>Training Specialist</td>
<td>Career Planning Specialist</td>
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<tr>
<td>Entrepreneur</td>
<td>Hotel Manager</td>
<td>Paralegal*</td>
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<tr>
<td>Travel Agent</td>
<td>Statistical Analyst*</td>
<td>Marketing</td>
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* Careers that require additional training/education

UW-Madison Department of Psychology (2014)

None of this means that your choice of major is unconnected to career outcomes; on the contrary, there are some interesting patterns that emerge from different kinds of majors. Researchers find that “social science majors are much less likely to work in jobs that are closely related to their major (20 percent), as are humanities majors (26 percent)” (Fogg et al 2012). But the further you go with your education — pursuing graduate school or professional school beyond your undergraduate degree — the more likely you are to find a career related to your major. And statistically, the likelihood that you will pursue graduate school is linked to the area of your major: “For example, bachelor's degree holders who major in a physical science are very likely to earn an advanced degree. [...] Those who earn an undergraduate degree in education are even more likely to earn an advanced degree, although they earn a master's degree much more frequently than a professional degree. In contrast, students who complete an undergraduate degree in business-related fields are less likely to earn any graduate degree. [...] Similarly, engineering majors are much less likely to earn a graduate degree” (Fogg et al 2012). In general, graduate school is an increasingly popular and important post-degree choice, according to the National Association of Colleges and Employers: “Nearly 40 percent of liberal arts graduates expect to continue on to another degree level before they begin looking for a job” (Koc 2010).

However, whether or not a particular major leads to a particular job, industry, or career is often less important to students (and their parents) when trying to choose a major than a second, more basic, underlying question: “regardless of the field I enter, will I be able to find adequate job security and salary?” As journalist Fareed Zakaria notes, “Since 1966, UCLA's Higher Education Research Institute (HERI) has asked incoming college freshmen a set of
questions. The data collected show the following: Over the last four decades, students have become more conscious of the need to make money” (Zakaria 2015).

As we saw in chapter 2, college students already enjoy a substantial wage premium in the labor market -- their lifetime wages are higher than those of their peers without a college education. We know from the economic data on skills and salaries — and from interviews with employers themselves — that this wage premium applies no matter what one’s major; organizations of all kinds value employees with the transferrable skills that come from a broad liberal arts and sciences education. These are the same skills as discussed in chapter 2, based largely on critical thinking and complex communication. Education reporter Jeffrey Selingo, author of two books on the subject, wrote that “Employers I interviewed in a variety of sectors understood the critical need for broad, liberal learning, even if they didn’t always use the language of higher education to describe it. Indeed, they told me that what will define success in the future is the ability of college graduates to tolerate ambiguity in their jobs” (Selingo 2016). Thus, whatever your major, as one Northwestern University professor described it, “keep in mind that there are four things you should take away from it. You should acquire a body of knowledge about a particular subject: what scholars have discovered. You should learn the standard methods of inquiry in your field: the ways that scholars gather information. You should gain the skills to analyze and process this information. And finally, you should get practice using these abilities to solve complicated problems in the field” (Roberts 2010).

But again, in terms of salary, some patterns emerge when considering broad types of majors. Immediately out of college, students with targeted professional or technical majors do tend to earn more, on average, than students with broader humanities majors; for example, “At the very top of the ranking are graduates with degrees in health-care and technical fields. These fields often require strong scientific and mathematical proficiencies” (Fogg et al 2012). But this differential disappears as one proceeds through their early career: “A longitudinal study conducted by the National Center for Educational Statistics found that the wage differentials that existed between career-oriented majors and academically oriented majors immediately following graduation were all but eliminated within 10 years” (Koc 2010). And of course, the type and scope of the organization you work for will likely have a much bigger effect on your salary and promotion path than your major: “An accounting major working for a small nonprofit organization in the Midwest will likely earn less than an English major working as an investment banker in New York City” (Brooks 2009).

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millennial generation

The generation of adults aged between 18 and 34 in 2015 (born between 1981 and 1997) who will compose 75% of the workforce by 2025 (Carlson 2017).
Even though salary is reportedly more important to college students than ever before, the **millennial generation** (adults aged 18 to 34 in 2015) also considers quality of work to be more important than previous cohorts of graduates. Psychologists Jean Twenge and Stacy Campbell (2010) report that “Almost twice as many young people in 2006 rated having a job with more than two weeks vacation as ‘very important’ than did in 1976, and almost twice as many wanted a job at which they could work slowly. Nearly half now want a job ‘which leaves a lot of time for other things in your life.’” In other words, the current generation “is less likely to want to work overtime and is more likely to say they would stop working if they had enough money.” Such choices remind us that not all jobs are to be found in the for-profit sector where the bottom line is money. In fact, “less than one-half of college graduates with a bachelor’s degree work as employees of for-profit business organizations,” because “Large shares of college graduates work for educational organizations, government agencies, and nonprofit foundations” (Fogg et al 2012). These outcomes are the result of students making academic and career choices on the basis of more than simply starting salary — such as how they want their work to affect the world.

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**way of knowing**

The shared concepts, theories, methods, and language that experts in your major use, not only to solve important problems in the world, but also to define what those important problems are in the first place.

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More important than choosing a major, perhaps, is succeeding in that major. This means developing an understanding of the **way of knowing** that your major represents — the shared concepts, theories, methods, and language that experts in your major use, not only to solve important problems in the world, but also to define what those important problems are in the first place. But grades matter too; in most cases, employers do screen applicants for low GPAs, according to surveys by professional advising organizations (Curran et al 2006). As a result “the higher your grade point average, the more opportunities will be available to you,” reminds career expert Katherine Brooks: “Many prestigious programs, including White House internships, FBI programs, pharmaceutical sales positions, Wall Street jobs, and so on, screen candidates by GPA. And obviously, the better your grades, the better the graduate or professional school you will be able to attend. Good grades give you more freedom to select opportunities” (Brooks 2009).

Finally, it is important to remember that most organizations in the business and non-profit world who seek graduates in the college labor market don’t expect to hire someone who knows the job from day one and continues to simply do that same job throughout their career; rather, they expect to hire someone who is able to continually learn and adapt as the business or social environment changes unpredictably over time. As one professor put it, “Most industries expect you to learn on the job, not to come already prepared. They
would prefer to hire a brilliant and creative English major over an indifferent economics major” (Roberts 2010).

Outside your comfort zone -- and off of the campus

Even recognizing that any given major can lead to many possible careers, it is important to remember that one’s college education is not easily reducible to one’s major. What we call the Wisconsin Experience at UW-Madison refers to the holistic combination of your major with all of the other educational and extracurricular experiences that college entails at Wisconsin: general education requirements, certificate programs (known as “minors” at other universities), research experiences, honors courses and theses, service-learning and study abroad opportunities, and paid or unpaid internships, just to name a few.
At UW-Madison and other research or liberal arts universities, these kinds of supplements to your major are often called **high-impact learning practices** because of the way they force students to bring together all of their academic training in a collaborative problem-solving situation. And recent research shows that the more of these practices you can experience while in college, the better your chances of both success and happiness on the job market (or the graduate school market) after college. UW-Madison students generally do quite well compared to their peers on these measures, according to the 2014 National Survey of Student Engagement:
UW-Madison high-impact learning outcomes

Service-Learning
About how many of your courses at this institution have included a community-based project (service-learning)?

Research with a Faculty Member
Which of the following have you done or do you plan to do before you graduate?

Work with a faculty member on a research project.

Internship or Field Experience
Which of the following have you done or do you plan to do before you graduate?

Participate in an internship, co-op, field experience, student teaching, or clinical placement.

Study Abroad
Which of the following have you done or do you plan to do before you graduate?

Participate in a study abroad program.
But why are high-impact practices considered so effective — and so essential? One reason is that these practices expand a student’s experience and force them “outside of their comfort zone.” Take service-learning, for example. This kind of course brings outside volunteer work with a community organization together with classroom conceptual and theoretical training, to create what is often a life-changing educational and reflective experience. Students of the recent generation already engage in community service more than any previous generation, according to a recent Nielsen study, *Millennials: Breaking the Myths* as reported by Fareed Zakaria (2015): “In 2011, 75 percent made a donation to a charity, 71 percent raised money for one, and 57 percent volunteered.”

Another extracurricular pursuit that will take you outside of your comfort zone — quite literally — is study abroad. According to education journalist Jeffrey Selingo (2013), “More than 270,000 Americans study overseas each year, nearly triple the number of two decades ago.” Such experiences range in duration and intensity from one week spent working across the continental border to a full year spent living thousands of miles across the ocean. Here at UW-Madison, our rates of study abroad participation are among the highest in the US: over 2,000 students per year, making us first in the Big Ten among public universities. Why do so many of our students pursue this part of the Wisconsin Experience?

Selingo (2013) notes that “Those who study abroad often see it as a life-changing experience. In one survey of alumni, it was the most significant aspect of their undergraduate years, ranking higher than college friendships and courses.” And employers value these experiences too: “Global companies and organizations find qualified candidates in different countries with diverse backgrounds. These employers require previous international experience as proof that a student can work in a cross-cultural work environment and that the student has the skills to succeed abroad” (Kenyon et al 2014).
Or consider another opportunity that can expand your horizons a little closer to home: **undergraduate research**. Building on the longstanding vision of the “scholar-teacher model” of education — where “researchers are said to be more effective because they are instructors, and instructors are said to be more compelling because they are actively creating knowledge as researchers” (Roth 2014) — almost all majors offer ways to engage in structured research experiences with faculty, whether through an independent study course or a senior honors thesis. Again, this is an important national trend, which has been growing for decades. Today roughly one-third of all college seniors produce some sort of final thesis or capstone project, and “Some three thousand students present their projects at the annual gathering of the National Conference on Undergraduate Research, up from just a few hundred at its first meeting in 1987” (Selingo 2013). And you don’t need a formal class to find one of these opportunities; professors who work in collaboration with other faculty, graduate students, and postdoctoral researchers in a laboratory setting often have both paid and unpaid openings for undergraduate participation, where students can engage in firsthand discovery leading to peer-reviewed publication.

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**Online Resource**

**Undergraduate Research**
[http://provost.wisc.edu/undergradresearch.htm](http://provost.wisc.edu/undergradresearch.htm)
Finally, there are also paid and unpaid internships to consider. Dating back to World War I when they were first established by medical schools, internships broadened to occupations outside of health care in the 1960s, and today are almost mandatory for some highly competitive fields like finance and media. For example, at Goldman Sachs, “59,000 students apply for 2,900 intern positions each year,” with the peak recruitment period for summer internships falling between February and March (Selingo 2015). One recent survey of more than 4,000 employers indicated that 75% would be offering internships in 2017-2018, seeking students from across all disciplines (CERI 2017).

Internships can be a great experience, especially if they are both paid and provide direct exposure to or training in the career that you are interested in. But unpaid internships can be a burden, especially to students from low-income families, and especially if those internships really don’t offer any kind of direct exposure or pathway into the paid jobs of the profession. The good news is that on average, according to a Collegiate Employment Research Institute study, “employers hire as full-time workers around 50 percent of the interns who worked for them before they graduated” (Selingo 2015). So if you can find an internship that is affordable, and if afterward it reinforces your desire to follow that career path, it can often be a direct step into that career.

Here’s an example, as reported by L&S communications writer Katie Vaughn in 2017, of one student’s internship experience through SuccessWorks:

By any account, Grace Corry has an impressive resume. She’s a triple major in Political Science, International Studies and French. She’s spent hours volunteering, and she’s committed to a career that prompts positive change.

Yet there’s something else that sets the student from Shorewood, Wisconsin, apart from the crowd: her internships. […]

In the fall of her junior year, Corry began researching internship opportunities. Inspired by her parents and older sister who work in the nonprofit sector, she set her sights on positions with community involvement in the description.

“I’ve seen how fulfilling it can be to give back in your job,” she says.

An internship within American Family Insurance's Community Investment Department piqued Corry’s interest. She interviewed in November, started in late May and decided to stay a full year. […]

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**ONLINE RESOURCE**

**L&S SuccessWorks Internships**
https://careers.ls.wisc.edu/ls-finding-an-internship/

**International Internships**
http://internships.international.wisc.edu
As one of roughly 70 interns at American Family, Corry participated in lunch-and-learn sessions and got to help her department partner with United Way of Dane County on a major conference.

While Corry understands that students already pack a lot into their schedules, she says they would be wise to make time for an internship.

“It’s training you to go out into the real world,” she says. “Seeing actual results of your work in a company or in the community, that’s really cool.”

Grace Corry in the American Family Insurance Dreambank office in Madison.

While paid and unpaid internships cannot provide formal academic credit like most service learning, study abroad, and research experiences do, internships can be paired with UW courses, such as the **INTER-LS 260** one-credit internship course which is delivered entirely online, allowing a student to complete an internship anywhere around the country (or around the world) and still be enrolled in a supportive class with an instructor, a professional career adviser, and fellow students. This is the best environment to reflect upon whether or not your internship enables transfer learning, or “the ability to generalize core principles and apply them in many different
places” (Selingo 2015). With the support of your instructor, adviser, and fellow students, you can use the class to better articulate what aspects of your major have transferred into the internship work, and what aspects of your internship experience will transfer back into your academic success — and into your first full-time job.

Examples of recent UW-Madison student internships

**Anug Saha**
**Hometown:** Astoria, New York  
**Major:** Civil engineering  
**Internship:** Skanska Walsh Joint Venture, the entity leading a major modernization and redevelopment of LaGuardia Airport  
**Bonus perk:** Assisting with the pouring of a major concrete bridge abutment, which involved conquering his fear of heights and climbing a 60-foot ladder.  
**More information:** ecs.wisc.edu/students/co-op-and-internship

**Ruth Lied**
**Hometown:** Skopje, Macedonia  
**Major:** International Studies and French  
**Internship:** U.S. Embassy in Ljubljana, Slovenia, through the U.S. State Department  
**Bonus perk:** Climbing peaks in the Julian Alps.  
**More information:** careers.state.gov/intern/student-programs/

**Andrew Strother**
**Hometown:** Twin Lakes, Wisconsin  
**Major:** Political science  
**Internship:** Republican National Committee, Washington, D.C.  
**Bonus perk:** Meeting Nikki Haley, U.S. ambassador to the United Nations.  
**More information:** polisci.wisc.edu/undergrad/internships

Doug Erickson (2017)
Service learning, study abroad, undergraduate research, and even guided internships all suggest a second reason that high-impact practices are so important: they allow for **direct networking with instructors**. Education journalist Jeffrey Selingo (2013) argues that “Finding passionate, engaged professors is critically important in the first year of college, when it is easy to remain anonymous in large lecture classes.” He cites the work of professor George Kuh, one of the original authors of the “high impact practices” idea, whose large-scale research on the National Survey of Student Engagement has illustrated that “getting to know at least one faculty member well in that year improves the chances that students will get more from their college experience.”

But even more important than expanding horizons and networking with instructors is the third benefit of high-impact practices: increasing what education researchers like Kuh call **time on task** — opportunities to focus on a particular problem in a deep, active, and sustained way (Selingo 2013). It might sound counterintuitive, but the more time you spend on an academic or extracurricular project, the more likely you will be to encounter failure — and that’s part of the point. In his recent book *There is Life After College* (2015), Selingo reported “Recruiters repeatedly told me that today's college graduates don’t have enough experience learning from failures or hardships, particularly on a job.” This feeds directly into Selingo’s advice for choosing a major: “find a major that will challenge you to work hard and one that will present you with opportunities to learn from the best professors and mentors.”

**Major mix-ins and soft skills**

Besides the broad high-impact categories of service-learning, study abroad, internships and research experiences, UW-Madison holds a host of other options that students can “mix in” with their education no matter what their major of study. These are targeted collections of courses and competencies which work together to bring a specific skill set to a student. Some of these are just bundled sets of two or three courses; some of them appear on your transcript as an official **undergraduate certificate** upon completion. And some are **professional capstone certificates** that you take after graduation. Here are just a few examples:

- **Digital Studies Undergraduate Certificate**: skills of searching, creating, and evaluating digital media in a variety of formats and platforms. [http://digitalstudies.wisc.edu](http://digitalstudies.wisc.edu)

- **Business Fundamentals for Non-Business Majors**: skills of building, testing, and marketing a business plan in the for-profit or non-profit world. [https://bus.wisc.edu/degrees-programs/non-business-majors/](https://bus.wisc.edu/degrees-programs/non-business-majors/)
• **GIS Capstone:** skills of thinking spatially and assembling, analyzing, and visualizing patterns of activity across the natural and human world. [https://www.geography.wisc.edu/giscertificate/](https://www.geography.wisc.edu/giscertificate/)

• **Afro-American Studies Certificate:** skills of understanding, analyzing, empathizing, and communicating about the rich experience and crucial impact of African-Americans in historical and contemporary US society. [http://afroamericanstudies.wisc.edu/programs/Certificate.html](http://afroamericanstudies.wisc.edu/programs/Certificate.html)

Employment recruiters sometimes call candidates with these sorts of unusual mixes of majors and certificates “**purple squirrels**” because such candidates who combine conceptual skills from one field and technical skills from another are both rare and valuable (Carlson 2017).

Beyond the specific technical or cultural skills that these kinds of certificates offer, most of them can help you acquire and demonstrate what are sometimes called **soft skills** — skills associated with things like “curiosity, creativity, grit, digital awareness, contextual thinking, and humility,” and especially “how people get along with one another, communicate, and work in teams” (Selingo 2015). For example, here’s how one former student in our course described the soft skills learned from classwork in the UW-Madison Mead Witter School of Music:

> I found that setting aside time to practice an instrument required discipline and self-motivation. Making sure I knew my part in choir and listening to those around me to achieve the best sound required effective teamwork skills. Befriending and convincing performers to play my pieces required top-notch communication. Building creative models of solo flute pieces in my composition course taught me how to extrapolate data from sets and think outside the box. Picking a piano piece to arrange for orchestra and meticulously proofreading each part showed me that the more time and effort I put into a project, the more pride I’d take in the final result.

We don’t call these skills “soft” because they are less valuable than other skills, or somehow easier to acquire; the so-called **hard skills** like technical or cultural knowledge that one gains from pursuing a university major in depth are simply easier to measure and standardize (Golinkoff et al 2016). In fact, some soft skills should be considered preconditions for even being able to develop hard skills. Take, for example, the soft skill of **executive function:** “being flexible in your thinking or finding another way to solve a pesky problem” while keeping your attention focused away from distractions or
dead ends. It is hard to imagine finishing any sort of extended scientific or literary project without having that skill. According to one education researcher, “these so-called ‘soft skills’ are not soft at all, but rather are more predictive of academic success than are the hard skills.” (Golinkoff et al 2016)

For all of these reasons, soft skills are increasingly important to for you to be able to consider, and demonstrate, in your job search. Consider the following study, as reported by Golinkoff (2016):

In April and May of 2006, a report titled Are They Really Ready to Work? was issued by a collaborative group including The Conference Board, Corporate Voices for Working Families, Partnership for 21st Century Skills, and the Society for Human Resource Management. More than 400 employers were asked what skills they considered most important and whether high school, 2-year college, or 4-year college graduates had these desired skills. It is interesting that the top five ranked skills were oral communication, teamwork, professionalism, written communication, and critical thinking or problem solving.

Human resources consulting firm Burning Glass (2013) reported similar findings nearly a decade later: “by coupling a field-specific skill set with the soft skills that form the foundation of a liberal education [...] graduates can nearly double the number of jobs available to them.” They figured this out by analyzing the skills requested in over 20 million job postings across a wide variety of industries (Selingo 2015). They concluded that “Employers report the greatest disparity between the skills they demand and those that recent graduates possess for written and oral communication skills, adaptability, and problem solving—all staples of a Liberal Arts education” (Burning Glass 2013).
Together the four strategies we have discussed in this chapter — high-impact practices that challenge you and put you in direct contact with instructors, serious time-on-task in the major, targeted skills outside of the major, and soft skills like creativity, humility, teamwork and curiosity — all help move your career narrative into the form of the “T-shaped hire” that we talked about in chapter 2. As Jeffrey Selingo (2015) put it, though, “There’s more to being T-shaped than just having breadth and depth, however. It’s also about having balance and the agility to pick and choose from a set of knowledge and skills as they are needed.”

At UW-Madison, we have many online resources available for students seeking internship, research, or service opportunities. Here are a few (though remember that links can quickly go out of date):

- **Handshake** job and internship database
  [https://wisc.joinhandshake.com/](https://wisc.joinhandshake.com/)

- **International Internships Program** database
  [http://internships.international.wisc.edu/internships/database/](http://internships.international.wisc.edu/internships/database/)

- **Morgridge Center** volunteer opportunities database
  [http://www.morgridge.wisc.edu/students-volunteer.htm](http://www.morgridge.wisc.edu/students-volunteer.htm)

- **Graduate School** summer research opportunity database
  [http://grad.wisc.edu/diversity/srop](http://grad.wisc.edu/diversity/srop)

- **WiScience** undergraduate research opportunity database
  [http://biology.wisc.edu/research.htm](http://biology.wisc.edu/research.htm)

- **CareerLocker** listings
  [https://my.wisc.edu/portal/p/wiscareers.ctf1/max/render.up](https://my.wisc.edu/portal/p/wiscareers.ctf1/max/render.up)
Ensuring equal access to educational opportunity

Providing these kinds of high-impact, “out of your comfort zone” opportunities — enhancing the intellectual freedom of choice to pursue your strengths and passions — is fundamental to what a liberal education is supposed to be all about. And universities that provide the cornerstone of liberal education in our society — especially the four-year, public universities attended by nearly a third of US high school graduates — are by definition intended to address concerns about economic disparity in society (Armstrong et al 2013). They are intended not only to provide equal opportunities to their talented and hard-working students without regard to socioeconomic status — claiming to be a meritocracy where the quality of one’s ideas, arguments and work is the only measure of success that counts — but also to provide the kinds of high-impact experiences and high-quality learning that will improve the lives of all students — contributing to overall economic mobility where graduates find a quality of life equal to or better than that of their parents. Many research findings support these hopes. In a recent article in the American Journal of Sociology, researcher Florencia Torche (2011) argued that a four-year Bachelor’s Degree still “offers equal opportunity for economic success regardless of the advantages of origins.”

Yet, like all of our other imperfect institutions, universities can fall short of their meritocratic and mobility ideals. Sociologists Armstrong and Hamilton, in their 2013 book Paying for the Party, point out that over decades of research on college outcomes, “There is strong evidence that parental resources (for example, money, social connections, cultural understandings, and educational aspirations) advantage affluent students in college access, admission, performance, and graduation.” They further argue that certain aspects of modern university life — especially what they call the party pathway through college, emphasizing televised spectator sports, alcohol-fueled social life, and conspicuous personal consumption over rigorous studying outside of classes — “systematically disadvantages all but the most affluent” (Armstrong et al 2013). If universities are to be sites of meritocracy and engines of mobility, they must take care to reduce barriers to success that are based on socioeconomic class, not perpetuate them.

UW-Madison has not shied from this challenge. For example, recognizing that high-impact experiences like internships can pose a unique economic challenge to students from low-income families, in Spring 2016 UW announced a three-year partnership with the Great Lakes Higher Education Guaranty Corporation which would provide over $360,000 to support over 200 new paid internships for “first-generation, low-income and multicultural, underrepresented students.” Other universities around the midwest received similar grants, with the combined effort directing $12 million to career development “to make internships more equitable for their students with financial need” (UW-Madison 2016). Similar efforts to provide scholarships for study abroad students and to provide free transportation for service
learning students show a commitment to making these “outside of your comfort zone” experiences accessible to the widest range of students possible. As we shall see later in chapter 9, these kinds of programs can help us build a more diverse and inclusive workplace for all.
1. What happens during the “unsettled period” in a student’s development?

2. What kinds of considerations should one bring to their choice of major?

3. Name three different “high impact learning practices” available to students at the University of Wisconsin.

4. What is “transfer learning” and how can extracurricular experiences support it?

5. What is “time on task” and why is it important to student learning?

6. What are “soft skills” and how does one acquire them?

7. Why should colleges ensure that they offer more than just a “party pathway” for undergraduate education?
READ MORE ABOUT IT


Anthony P. Carnevale, Jeff Strohl, and Michelle Melton, *What's it worth? The economic value of college majors* (Georgetown University Center on Education and the Workforce, 2011). Based on the 2009 American Community Survey, concludes that a college degree is clearly still valuable no matter what your major.


Ross Perlin, *Intern Nation: How to earn nothing and learn little in the brave new economy* (New York: Verso, 2012). Ross Perlin is a contemporary critic of the practice of for-profit organizations employing unpaid interns, and his cautions are worth considering.

Andrew Roberts, *The Thinking Student's Guide to College* (Chicago: University of Chicago Press, 2010). Written by a Northwestern University professor, provides advice on making the most out of your undergraduate years using critical reflection.
“Hi, I’d like to add you to my professional network on LinkedIn.”

This request might seem obvious in an age of mobile devices, Twitter handles, and LinkedIn pages. But social network technologies like smartphone apps and profile sharing platforms are not the same as “social networks.” After all, on the Web, social network sites are only about twenty years old. We might point to SixDegrees.com, founded in 1997 (about five years after the Web first exploded into the public consciousness) as the first company to try to take the practices of social networking and translate them to web
technology. As media scholar danah boyd and her colleagues (2008) describe, “SixDegrees.com allowed users to create profiles, list their Friends and, beginning in 1998, surf the Friends lists. Each of these features existed in some form before SixDegrees, of course. Profiles existed on most major dating sites and many community sites. AIM and ICQ buddy lists supported lists of Friends, although those Friends were not visible to others. Classmates.com allowed people to affiliate with their high school or college and surf the network for others who were also affiliated, but users could not create profiles or list Friends until years later. SixDegrees was the first to combine these features.” But “While SixDegrees attracted millions of users, it failed to become a sustainable business and, in 2000, the service closed.”

Despite its early demise, SixDegrees demonstrated many of the qualities that many online social network technologies still possess, which work against their usefulness for career-building:

- Such sites often initially attract homogenous populations — people who are largely similar to each other — and result in users self-segregating by factors like nationality, age, education level, class, gender, or race/ethnicity.
• Such sites make visible **preexisting social networks** of contacts, friends, or fans, but don’t necessarily lead to the growth of those social networks or the development of new social networks.

In other words, not all “social network technologies” are designed to facilitate “social networking” in the sense of exploring ideas and building relationships with new people previously unknown to you.

This chapter explores not just social networking technologies, but the dynamics of social networks themselves, to provide some background on the relational aspects of both academic and career success — aspects of community and cooperation that can get lost in the narcissism of personal brand-building and self-promotion.

**Mapping small worlds**

One of the key markers that today’s social network technologies make visible is a simple measure of scale of one’s social network — for example, how many Facebook friends or Twitter followers you have, in total. But what does “scale” mean in such a network? How many of the “links” in your social network are useful to you for generating new ideas or learning about new opportunities? It would be useful if we could map out such social networks in greater detail — and then learn from those maps about how networks function in the first place.

There’s a popular online meme that explores this very idea: the **Kevin Bacon Number**. In 1997, about the same time that SixDegrees.com was getting started, a group of students at William and Mary College found a new way to use the online Internet Movie Database (IMDb.com) which attempts to catalog metadata like title, plot, and cast for every film ever produced. By the late 1990s, IMDb held metadata on roughly 500,000 actors who had participated in over 200,000 feature films from 1898 to 1997. The students found a way to use this database in a silly parlor game, as explained by sociologist Duncan Watts (2003): “If you have acted in a movie with Kevin Bacon, you have a Bacon number of one (Bacon himself has a Bacon number of zero). Since Kevin Bacon has acted in quite a lot of movies (over fifty at the time of writing) and at last count had acted with 1,550 people, it follows that 1,550 actors have a Bacon number of one (Bacon himself has a Bacon number of zero). Since Kevin Bacon has acted with many more people than the average (which is only about sixty), but it is still less than 1 percent of the total population of movie actors. Moving outward from Bacon, if you haven’t ever acted with him, but you have acted with somebody else who has, then you have a Bacon number of two. [...] In general, the object of the game is to determine an actor’s Bacon number by figuring out his or her shortest path to the great man.”
Watts knows a lot about the Bacon Number Game because he was one of the first researchers to actually use the IMDb network to start testing theories about how people’s social connections map out in different social circumstances. Watts wondered whether the trick of being able to find a short path from practically anybody to Kevin Bacon was a function of the particular agency of that actor himself (having acted with 1,550 people) or a function of the structure of the movie industry and the resulting life of any actor (considering the reasons that lead directors to cast movies, select costars, and choose how many people can feasibly be featured in a two-hour production). So Watts used the IMDB to model what would happen if you used other actors as seeds instead of Kevin Bacon. As it turns out, when you computed anyone’s number (the Harrison Ford number, the Naomi Watts number, etc.), two patterns emerged: (a) no matter who you started with, every actor could be connected to every other actor in an average of less than four steps; and (b) every actor’s costars in a movie starred with each other 80% of the time (Watts 2003).
Watts called this a **small world network** because (a) to any individual participant at any particular moment, it looks like they are surrounded by a very small group of people who are homogenous (they keep starring in the same movies with them) — the “small” part; but (b) really, all participants, no matter how “distant” or different their experience, can be reached through only a few short steps (about four connections) — the “world” part.
Other researchers had found something similar, two decades earlier, well before the development of online social network technologies. In 1967, Harvard psychologist Stanley Milgram led a series of experiments where his team arbitrarily selected hundreds of individuals by mail, asking them to forward a postcard to a named target individual in Boston, simply by sending the card to a friend who they thought might have a greater chance of knowing the person than they did. They found some striking patterns: (a) on average, it took about five to six steps to get to the target individual (this is the source of the later-coined phrase **six degrees of separation**); and (b) nearly half of the pathways passed through three particular persons, who Milgram referred to as the “stars” in the social network (powerful nodes with lots of diverse friendship links) (Travers & Milgram 1969).

**Small worlds and career development**

So how do such “small worlds” — where close, visible links seem to be people very similar to you, but it is actually possible to reach distant, diverse people by following links over just a few steps — connect to the career development process? Scholars who study business practices around hiring
have long known that employers much prefer to hire individuals who are personally known to their current employees than to hire individuals who are found through more impersonal help-wanted advertisements or unsolicited résumés. According to a recent article in the *Occupational Outlook Quarterly*, jobseekers should avoid relying only on the dart board approach to finding a job, where one sends out hundreds of résumés in hopes of receiving one or two interviews, and instead take advantage of the hidden job market, where organizations interview people based on a referral from someone trusted (Vilorio 2011). In one recent survey of young professional workers, half of the respondents found their current position through such hidden job market networking: “introduced to the hiring manager through a personal connection, were recruited by someone they knew, leveraged their university’s alumni network, or were recommended to someone at the company by a family friend or mentor” (Citrin 2015).
What kind of networks matter most to a successful job search? Sociologist Mark Granovetter offered an answer to this in the 1970s, in his book *Getting a Job*, after tracking how nearly 300 male technical, professional, and managerial workers in a Boston suburb found jobs. As might be expected, he found that referrals through social networks were the most prevalent (and most productive) means of changing employment. In fact, “A number of respondents even had the odd experience of being refused a job for which they applied directly, only to be accepted later for the same job through personal contacts” (Granovetter 1974).

But it was the question of which members of one’s social network provided the best job information that most surprised Granovetter. Dividing the job-
seekers’ networks into **strong ties** (the closest, most trusted, and most similar connections) and **weak ties** (the most distant and diverse acquaintances), Granovetter coined the term “**the strength of weak ties**” because he found that “professional, technical, and managerial workers were more likely to hear about new jobs through weak ties (27.8 percent) than through strong ones (16.7 percent)” — perhaps because “individuals with few weak ties will be deprived of information from distant parts of the social system and will be confined to the provincial news and views of their close friends.” Or as author Meg Jay in her book on twenty-year olds poetically put it, “Weak ties are like bridges you cannot see all the way across, so there is no telling where they might lead.” (Jay 2012) This is not to say that the strong ties are useless: “strong ties have greater motivation to be of assistance and are typically more easily available.” But strong ties have limitations — what sociologist Rose Coser called “**the weakness of strong ties**” in 1975, just a year after Granovetter’s study was published (Coser 1975). “Our strong ties feel comfortable and familiar but, other than support, they may have little to offer,” described Jay. “They are usually too similar — even too similarly stuck — to provide more than sympathy. They often don’t know any more about jobs or relationships than we do.” (Jay 2012) Thus to be successful in a job search, a candidate must be able to draw on both kinds of resources — acting like a **bridge** between both the people closest to us and most similar to us, and the people more distant from us and somewhat different than us (Granovetter 1983).

### Personal branding within social networks

The study of small world networks reminds us that many decision makers with employment opportunities may actually be connected to us through a short path of friends, family, instructors, peers, and colleagues. So how do you stand out within this network of possibilities? One way is to adopt the techniques of organizations themselves when they are trying to build consumer excitement about the product or service that they offer: build a powerful **personal brand** that efficiently and memorably communicates value to a target audience.

The notion of personal branding is commonplace in the business press right now, but much of the hype can be traced to a 1997 article titled “The Brand Called You” in the new-media business magazine *Fast Company*, written by a management consulting expert named Tom Peters. Back in 1982 Peters had co-authored the business bestseller *In Search of Excellence* which profiled 43 top for-profit companies to discover “8 basic principles that made these organizations successful.” Peters brought a similar idea to his 1997 article, except this time he focused on individuals rather than corporations: “We are CEOs of our own companies: Me Inc. To be in business today, our most important job is to be head marketer for the brand called You” (Peters 1997).
This article by Peters spawned a cottage industry of similar books and articles — including one titled *The Start-Up of You* co-authored by one of the founders of LinkedIn, Reid Hoffman. But the basic message in each case was the same: since organizations no longer hire employees for life, abandoning the “linear” career with a corporate ladder (or what sociologists might call an “internal labor market”) for a new and contingent set of constantly-changing, project-based work, you’ve got to be an **embedded entrepreneur** and sell yourself in order to succeed over time. According to Peters: “Forget your job title. Ask yourself: What do I do that adds remarkable, measurable, distinguished, distinctive value? Forget your job description. Ask yourself: What do I do that I am most proud of? Most of all, forget about the standard rungs of progression you’ve climbed in your career up to now. Burn that damnable ‘ladder’ and ask yourself: What have I accomplished that I can unabashedly brag about?” (Peters 1997)

Advice to brand yourself can sound a lot like the worst excesses of advertising — exaggerate your résumé, “spam” social media sites, and get your name out in front of the audience in any way possible. But that’s not it, according to Peters and other “brand you” consultants. “If you hear that,” writes a business consultant in Gallup magazine, “proceed with caution. These folks are confusing strategy with tactics. Your résumé, your interview, your networking groups, your Facebook page, your tweets, your LinkedIn connections — all that stuff is tactics. They’re the ways in which you reveal your brand” (James 2009). That brand itself needs to be built on long-term relationships where you’ve demonstrated to multiple decision-makers that
you’re productive, curious, trustworthy, and in general a valuable addition to their organizations. For example, in one study of creative workers in the fashion industry in London and Milan, branding was less about what one wrote on their own social media site, and more about the positive and cooperative reputation they had built up with peers on different projects over time: “to attract attention to one’s personal brand is also about receiving recognition for one’s ability to ‘give’ and ‘contribute’” to the community within which one works (Arvidsson et al 2016). Or as the founder of amazon.com, Jeff Bezos, is alleged to have quipped, “Your brand is what people say about you when you’re not in the room.” (Clowes 2015)

In other words, brands are built through hard work rather than the “sizzle” of marketing. As one career adviser describes it, “branding” has a confused meaning only if you mistake “networking” for an advertising exercise in the first place: “To me, networking connotes a giant cocktail party with inexpensive wine and hundreds of people I don't know all looking for a job. It involves a one-way street of exploiting others for your own gain. I much prefer the words and spirit behind the two-way street of relationship building” (Citrin 2015).

**Online tools for networking and branding**

Now that we have a rough understanding of social networks as depending on a geography of interpersonal relationships (some close, some distant, but each important in different ways) and of personal branding as more than simply advertising (incorporating not only self-promotion but also long-term trust-building), we are ready to consider how online tools like social networking services can help you grow and mobilize your social network and your personal brand.

As of this writing, the number one social networking service to be present on for an entry-level job search in the college labor market is LinkedIn.com — and while this will inevitably change over time, a specific understanding of how LinkedIn works and how to make the most of it will help you when the next hot Internet service comes along in a few years’ time.

LinkedIn was founded in 2003 by Reid Hoffman, and became a public company a little less than a decade later in 2011. Five years after that, it was purchased by Microsoft for $26.2 billion (though it will continue to operate as an independent brand). Recently the company counted over 400 million individual members and 3 million organizational members (including every Fortune 500 firm). The average user is aged 25-34, and more than half of the users hail from outside the US (especially from India, Great Britain, and Brazil). While a wide range of industries are present on LinkedIn, high-tech, finance and manufacturing firms dominate. And with a recent push to sign up college users, some 39 million students and recent graduates are members
All of these metrics are important to the strategy that LinkedIn uses to turn its database into a profit center. For example, unlike Facebook, which generates nearly 90% of its revenues from advertising to its users, LinkedIn generates less than 25% of its revenues from advertising. Another 20% of LinkedIn’s revenues come from its “premium subscriptions” (paid users who have access to more services). But the majority of LinkedIn’s $1.5 billion in revenue, over 55%, comes from what are called talent solutions — in other words, the services and data that LinkedIn sells to corporate human resources (HR) departments and outside search firms (“headhunters”). After all, LinkedIn can not only help companies find likely job candidates, it can also tell companies things like which universities provide the most candidates to a company’s industry (or to its direct competitors), or which combinations of skills and experience seem to be commanding the highest wages in the labor market (MarketLine 2015; Bonson 2013; Korkki 2013). It does this by mobilizing all of the data it has aggregated, or what it calls the economic graph, to create a “real-time picture of employer needs and the skills people have around the world” (Selingo 2015). In practice, LinkedIn becomes used as “the first place to check out a new contact,” whether that person is a potential employee, a potential client, a coworker, or a competitor (Zhang et al. 2014).

So you might think of LinkedIn as serving as all of the following old-style business technologies, simultaneously:

- As a phone book (for you to create your listing so people will find you)
• As a business card (for you to pass along your information to someone in a low-stress way)

• As a Rolodex (for existing contacts to seek you out or seek their own network for specific skills)

• As the help wanted section of a newspaper (for firms to advertise openings to a general audience)

• As a temporary employment agency (for firms to seek out individuals with very specific skills)

• As a corporate recruiter (for firms to seek out individuals who work for the competition)

• As direct mail (for people to advertise their services to you and find clients)

And add one more to that list: as a detective agency for employers, even if they’ve found your résumé through other means. An Adobe Corp. survey of over 1,000 hiring managers in 2014 revealed that nearly half searched out applicants on social media — predominantly to check for red flags (signs of behavior or attitudes that could be damaging to an organization’s functioning or brand if this employee were hired), but also to check their communication skills “in the real world context” (Adobe 2014).
Using LinkedIn effectively

So what does all this mean for how you should use LinkedIn as a liberal arts and sciences student seeking employment? In general, if you use LinkedIn — and we advise that you do, at least until another such market-dominant system comes along — you should use it as completely, and professionally, as possible. For example, in terms of branding, LinkedIn’s own data suggests that “a photo will increase by 11 times the likelihood that recruiters will click on your name” (LinkedIn.com 2015). LinkedIn offers users the chance to post work samples — even multimedia presentations — so that employers can judge communication skills directly (Taub 2013; Goel 2014). But turn off the feature that broadcasts all of these changes to your network of contacts; that kind of non-update is considered to be impolite data smog.

In terms of social networking, joining a group or following an organization are two good ways to get to know decision-makers in an industry. And remember, the goal is not to amass the most contacts; the goal is to cultivate meaningful contacts. Include a personal message whenever you request a “link” from someone, and only respond to invitations to join someone’s network if you are able to articulate the real-world connection that exists between you and that person (Korkki 2013). (For example, as a UW professor, I will always respond to requests from UW-Madison students to be part of my professional network; however, I don’t respond to link requests from outside faculty I have never met or heard of.) Finally, note that LinkedIn is always developing new tools, especially for the college student market; in early 2016 the company released a LinkedIn Students app for both iOS and Android mobile platforms, designed to help students translate their majors to possible careers based on data within the LinkedIn network.

Whether using LinkedIn for either personal branding or social network curation, make sure to engage in what media scholars call boundary regulation: keeping your social media identities on different services distinct and, in some cases, private. The way you perform your identity, your personality, and your life on Facebook among a small circle of family and close friends should be entirely distinct from the way you portray your actions in the world on a professional career-focused site like LinkedIn. This helps avoid the context collapse of your different social networks merging together in unproductive or unwanted ways (Zhang et al. 2014).

If the recent history of the high-tech industry is any indication, LinkedIn probably won’t be the dominant social networking platform for career-building forever. But whatever online tools you use for networking, make sure you use them on your own terms, in a way that is polite, professional, and ultimately effective for your personal career goals.
Don’t neglect your offline social networks

It is important for you to understand and optimize your use of information infrastructures for job-seeking — not only the platforms that job-seekers use to bring their career stories to employers, but also the databases that employers use to sift and screen applicants for positions (more about this in chapter 8). But no matter how effective your use of online technology, remember to also take advantage of the unique and valuable in-person social network opportunities that your university environment offers to you. After all, the modern university is itself an information infrastructure, designed to bring experts together to produce, test, and pass along knowledge — what better environment could there be in which to produce, test, and pass along your own career story?

For example, consider this strategy for in-person networking with your fellow university community members: professors and instructors. Every time you take a course without introducing yourself to the professor or instructor, even just dropping in for 15 minutes during office hours, you’re missing an easy opportunity to build your professional network — and to get help in that particular course, besides. As one professor writing in a recent career-advice book put it, “Once the professor knows you, it is much easier to be successful in the course. If it’s a difficult class, go to their office hours and ask for help. Let them know you sincerely want to learn what they are teaching and want to improve your skills and knowledge. This can turn a C paper into an A paper very easily. But the inverse is also true: If you never attend class, showing up only to turn in your homework, take the midterm, and take the final, your professors will notice.” (Terhune & Hays 2013) In the same way, don’t forget to practice networking with academic and career advisers — or even fellow students — who you meet each semester.

This sort of in-person networking takes time and effort, but if practiced consistently, it may very well allow you to form a rare and powerful connection to someone whose career path you admire, and who is willing to help you work through your own career decisions: a professional mentor. This term originated with Homer’s *Odyssey*: The wise elder named Mentor provided advice to Odysseus’s son Telemachus during his father’s long voyage away from home — and in the end, Mentor was revealed to be Athena, the goddess of wisdom, in disguise (Vasan & Przybylo 2013). But good mentors don’t simply dispense advice; they provide counsel instead. The difference is crucial, according to Stanford design professors Bill Burnett and Dave Evans (2016): “‘Counsel’ is when someone is trying to help you figure out what you think. ‘Advice’ is when someone is telling you what he or she thinks.” They explain, “Counsel invariably begins with lots of questions aimed at accurately understanding you, what you’re saying, and what you’re going through. Good counselors will often seem to ask the same question a couple of times from different points of view, to be sure they’re getting it.” In short, “they’re focused on you -- not on themselves.”
As advisors, counselors, or mentors, the people you encounter every day at university offer a unique resource as you seek information on jobs, employers, industries, and careers. Taking advantage of this social network provides you with a third form of career-building “capital” besides the “human capital” of skills and knowledge (from chapter 2) and the “identity capital” of introspective awareness (from chapter 4): the social capital of trusted and reliable peers and mentors. On one hand, these individuals represent classic “strong ties” in that they are committed to working on your behalf and often know you quite well. But on the other hand, since a university by definition brings together people from different backgrounds, different ideologies, different stages of life, and different parts of the world, many of your professors, advisers, and fellow students can also serve as “weak ties” that connect you to communities much more diverse and distant from your own. As we have seen, successful social networkers are able to “bridge” between their strongest and weakest ties, to draw upon the benefits of both. Remember that your university community — especially the “circle of support” of the INTER-LS 210 class that we mentioned in chapter 1 — is there for you.
REVIEW QUESTIONS

1. What is a social network and how do you build one?

2. What are the characteristics of “small world” social networks and how do they relate to job searches?

3. What is the “hidden job market” and how do you access it?

4. What is a “personal brand” and why is it useful?

5. How does LinkedIn earn revenue, and what does that mean for you as a user of its service?

6. Why might organizations check your LinkedIn site (or other social media sites) before offering you a job or an interview?

7. Why should one practice “boundary regulation” when using online social networks?

8. Why is it important to build “social capital” as well as “human capital” and “identity capital”?
READ MORE ABOUT IT


7 Researching workplaces and career communities

“What do people do all day?”

This title to a well-known children’s picture book by Richard Scarry sums up one of the biggest challenges of turning a particular set of academic and extra-curricular experiences — your major, your certificates, your student group memberships, your summer jobs — into a pathway to a particular job, organization, or career: how do you know what a hiring organization will want or need? Fortunately, as an undergraduate student pursuing a liberal education at a public research university, you practice the research and investigation skills that you need to answer this question in every one of your classes. This chapter provides advice on the three main modes of researching possible career paths and organizations that you might work for: searching out information about the career online; getting involved in career fairs and professional clubs; and personally asking key members of your social network who are connected to that career, especially through a semi-formal conversation known as an “informational interview.”
Gathering information online

With tools like Google, Wikipedia, LinkedIn, and even the free economic information provided on the Web by local, state, and federal government, every job search and career exploration should begin with an online search. One good strategy is to try to put together a two-page dossier of information on each organization that interests you as a possible future employer. This needs to be more than a few bullet points; you should know enough about the organization, and the work opportunity, to understand what they do, why they do it, and how you might fit into the mix. For example, here are some questions to answer:

- What is the mission of the organization? What is the purpose of the job?
- What products or services does the organization provide to the world? Does it have any competitors?
- Is the organization for-profit or non-profit? Is it publicly-owned or privately-owned?
- How is the organization seen by others in the same industry or profession? What is its reputation for work culture?
- What does the organization say about itself?
- Who currently heads this organization? (Any connection to you?)
- What types of changes, trends, societal and economic factors are occurring or impacting the work that this organization does?
- How large is the organization? Do you know if the work opportunity you seek is under a certain division, department, program or project within organization? What can you find out about this part of the organization?

Of course, the most important background to prepare before submitting materials to an organization — and before attending an interview — is to understand the competencies required for the position that you’re seeking. Remember, your interviewer will likely employ a competency-based interviewing strategy (as discussed in chapter 4), so try to figure out:

- What are the minimum/required qualifications and preferred/desired qualifications for the job you seek? (Which ones do you possess?)
- What are the duties required of the job? (Which ones do you have experience or transferable skills for?)
- What kinds of challenges would someone expect on this job? (Which ones have you faced in similar ways through other experiences?)
- What are the three most important things you would learn by being affiliated with this organization or trying out this work opportunity?
Much of the information about the competencies required for a particular job will be contained in the position announcement or advertisement for the job itself. But if not, use other sources — even the web sites or job advertisements of the organization’s peers and competitors — to figure out what competencies you might be asked about in an interview (Kessler 2006).

LinkedIn provides some good tips for researching the 3 million prospective employers listed on their service:

**LinkedIn advice for researching employers**

1. **Discover Top-of-Mind Topics**
   Most company pages contain a feed of recent articles and announcements. Take a hard look at the news they share. This will reveal company initiatives and topics. For an easy way to stay up-to-speed during your search, simply follow your target companies on LinkedIn.

2. **Uncover Connections**
   The “How You’re Connected” tool shows who you might know at a company. If you’re not connected directly, looking at the 2nd degree connections will show which of your 1st degree connections can make an introduction. Reach out to current employees to learn about the company’s culture.

3. **Align on Culture and Values**
   Most Company Pages contain a mission statement of some kind. Seek to uncover where your values align with a prospective employer. You’ll have a much better answer when the hiring manager asks, “Why do you want to work for us?”

4. **Find Similar Companies**
   Each company page will have a “People Also Viewed” section. This is a great tool for finding companies you hadn’t yet considered.

*The Student Job-Hunting Handbook (LinkedIn, 2018)*
Besides searching out information about particular organizations online, you should also consider how geographically mobile you are willing and able to be in your job search, and review information about different cities or regions and the jobs, industries, and careers which are prevalent there. Much of this is public information, and is freely available from government sites like the US Census Bureau (http://www.census.gov). Increasingly, outside organizations are adapting this public data to make it easier to use and visualize. You can use a new online resource developed by the MIT Media Lab called “Data USA” (http://datausa.io) to query employment data for just about any city in the US. For example, in the Madison, WI area, you can find out which occupations are both overrepresented and underrepresented compared to other areas:
Web searches, while easy and effective, are nevertheless anonymous and sterile as well. But we’ve already seen that several social networking web services allow you to leverage the wisdom of crowds by tracking what other people have done with a certain major, job, or career.
For example, LinkedIn can be a great tool not only to popularize your own career, but to learn about the career paths (and connections) of others. Education journalist Jeffrey Selingo (2015) gives an example of how to do this:

Say you want to know more about people who majored in biomedical engineering in college. The search on LinkedIn returns some sixty-six thousand LinkedIn members with that degree. Their top three employers: GE Healthcare, Medtronic, and Siemens Healthcare. Click on GE Healthcare to see that its nearly five hundred majors are employed as engineers, researchers, and in sales, and twenty of them went to Marquette University. Dive a little deeper into profiles to find out details about their lives, the jobs they held, their skill sets, and how they are connected to other companies and people.

You can try this yourself. On LinkedIn, search for “University of Wisconsin Madison” to see the nearly 300,000 alumni who are listed on this service. (You can save this search for viewing and filtering later.)

As a UW-Madison student, perhaps the best way to use LinkedIn in this way is by becoming a member of a new service sponsored by the Wisconsin Alumni Association, called Badger Bridge. This social network sits on top of LinkedIn and provides a safe space for current and former UW-Madison students to meet, trade information about internships, and even build long-term mentoring relationships. Membership in Badger Bridge is free, so sign up today at http://badgerbridge.com/
Other social networking platforms are used by UW-Madison alumni too. For example, you might try the Twitter feed of an alumni group in a particular city or region to find someone who might be willing to answer your question. Professor Downey maintains a publicly-viewable Twitter list of UW alumni feeds at https://twitter.com/gjdowney/lists/uw-alumni-chapters

**Participating in student clubs and Career Fairs**

Here at UW-Madison, besides the great online tools described above, you also have access to a some great “offline” tools for gathering quality information about prospective employers: professional clubs run by and for students targeting various industries and professions, and the large-scale Career Fair events held every semester right here on campus.

On a large campus like UW-Madison, navigating through the vast landscape of more than 800 student organizations and opportunities can be daunting. But there’s a quick and easy portal to find professional organizations called the **Wisconsin Involvement Network**, accessible online at http://win.wisc.edu
Clicking on the “Organizations” tab lets you filter the list by “Academic/Professional” groups to find opportunities like these:

- Academy of Managed Care Pharmacy Student Chapter
- Actuarial Club
- Advertising Club
- Agricultural Business Management Club
... and that’s only the first page of over fifty pages of listings!

Your involvement in one of these clubs can be as intense or as casual as you wish. At first, you might just want to attend a meeting to get to know some other students with your shared career interest -- and to discover what majors they are pursuing, what courses they are taking, and what internships they’ve experienced. (See, you are building your social network already.) Over time, you may want to participate in some organized outings (like a visit to a regional employer) or even run for a leadership position in the group. Whatever your level of involvement, you are sure to learn more about the language, culture, and expectations of the career you are interested in.

Career Fairs events are in some ways the opposite of student clubs, providing punctuated “breadth” of exposure to employers from many different fields at once, rather than regular “depth” of experience with particular professions week-by-week. Here at UW-Madison, L&S SuccessWorks participates in half-a-dozen campus Career Fairs each year: a fall Career and Internship Fair, a fall Public Service Fair, a fall Multicultural Career and Internship Fair, and a fall Computer Science Job Fair (the Career and Internship Fair and the Public Service Fair are also offered in the spring). And before each event, students can attend free preparation meetings for last minute work on their résumés — or even to hear tips directly from the employers who will be at each fair! In a given year, over 400 different employers attend these events, and nearly 2,000 students register to participate. (That might seem like a lot, but it is actually less than 13% of all undergraduate students at UW-Madison -- all the more reason for you to strive to be one of this select group!)
Planning your participation in these events beforehand is important. As Kay Clowes writes in her recent book “Put College to Work” (2015), “In order to make job fairs worth your while, you can't just stumble in, look at each company's booths, take some preprinted brochures, and leave. You’re going to have to do some research and planning and approach the job fair booth like it’s your first interview at a particular company instead of an information session. That's because -- essentially -- this is an interview.”

A great way to prepare and plan is to visit L&S SuccessWorks to talk to an expert in the specific cluster of occupations that you might be interested in — what we call a **career community**. Our career community advisors offer extensive, specialized knowledge about occupations within each community, as well as connections to employers, alumni, and events. The current career communities available include:

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L&S SuccessWorks (2016)
You can find out more about these career communities, and make an appointment with a community adviser, at https://careers.ls.wisc.edu/what-are-career-communities/

No matter what specific career community you’re targeting, Career Fairs can be large, energetic and hectic events, so it pays to be prepared to take written notes of the conversations you have and the people you have them with. “Carry a nice pen and put a notepad in your folder so you can take notes,” advises Kay Clowes (2015). “Type up and print out the notes you made about each company during your research. Carry those with you in case you want to brush up as you go. Trust me; after you’ve talked to a half-dozen company reps, you’re going to forget some of the details you so carefully researched.”

Once you do get in front of a company representative at a Career Fair, Clowes recommends “Make sure that you ask questions about the company culture, what the recruiters love about the company, what projects you might be working on, the management structure, and any training it might offer entry-level employees.” Here’s a list of ideas from L&S SuccessWorks — questions that previous students have found to be effective at their own Career Fairs:

- What skills or traits do you look for in candidates?
- What is your company’s hiring timeline?
- What are some of the key responsibilities of this job/internship?
- What is a typical career path for someone coming in at my level?
- What kind of training program does your firm have? Formal/Informal? Short term/Long term?
- What is a day like in this position?
• What type of formal education is required for entry-level, mid-level, upper-level, positions?
• Do people filling this type of position work in a structured or non-structured environment?
• How is performance evaluated? How often?
• What degree of task variety would a person see in their first year?
• What opportunities did you take advantage of while you were in college to help you prepare for your job?
• How did you begin your career? If you had anything to do differently, what would it be?
• How would you describe your job?
• What do you like/dislike most about your job?
• How much client contact do you have?
• How much contact do you have with others inside your firm?
• How much freedom do you have to decide what you want to work on and how to plan the project? How much does this change with experience?
• What is your company’s policy on continuing education? For example, will they reimburse you for classes taken towards higher education?
• Is relocation/travel typically required in this career field?
• Where does your organization have offices within the U.S.? Worldwide?
• How easy/difficult is it to transfer to another location?
• What professional societies or associations should I join?
• Which professional publications in this field should I read?
• What important changes are occurring in your field now? How will they affect the career of someone like me just starting out?

Such questions help convince recruiters that you’re curious about what they do -- and serious about what you can offer to them.

**Conducting an informational interview**

Whether you use LinkedIn, BadgerBridge, Twitter, or in-person contacts through clubs and Career Fairs, your eventual goal in reaching out to your social network should be to conduct an informational interview about a particular career, organization, or job, with someone who has direct
experience with that area. Remember, in an informational interview you are not asking for a job — you’re asking for advice, insight, and even mentorship. One goal for any informational interview should be to keep the interviewee as an available contact in your social network for possible job referrals later.

Here’s a sample template for reaching out to an interviewee:

Hello, my name is ____________. I am a college student at the University of Wisconsin investigating career opportunities and trying to make some good decisions. I was referred to you by ______________, and after hearing about your career and current position, I thought you might be able to help me answer a few questions. Would you have 20-30 minutes sometime to talk with me so I can find out more about your organization and how someone with my background and skills can fit into this field?

Arrange a time that is convenient for your interviewee. Try to hold the interview in person if you can; only use the phone or email as a last resort. And dress appropriately for the meeting, to show professionalism and respect for your interviewee’s time.

Each informational interview should be tailored to the particular person and work area that you’re learning about. But here is a generic list of structured interview questions to start with:

1. Tell me about your duties and responsibilities in your job.
2. What is a typical day like in your job?
3. What is the environment like in which you work?
4. What are the three most important aspects of your job?
5. Who do you collaborate with in your job? How does this collaboration help you be more effective in your job?
6. What major did you have in college? What courses did you take that are helping you in your job?
7. Did you complete an internship as part of your college experience in preparation for your job? Describe it.
8. If you knew someone was coming into your job, what strengths would they need to have to be effective?
9. Could someone do your job with different strengths than yours? How?
10. What advice would you have for someone who is looking at going into a career similar to yours?
Finally after the meeting is over, thank your interviewee, not only in person, but with a follow-up note or email a day later as well. (Busy professionals use their email history as their record of who they’ve talked to and why — so if you leave a positive impression, you are more likely to be able to call upon this person again in the future!)

Your departmental, college, or campus career services office will have more tips and contacts for informational interviews. And the web site [JobShadow.com](http://JobShadow.com) has an archive of transcribed interviews with professionals in a wide range of careers who talk about their jobs.

Ultimately, all of your career research — especially your informational interviews — should feed back into the social networking dynamics described in chapter 6: you want to be able to find mentors who you can call upon again and again for advice, and who will advocate for you when job opportunities arise. People you meet through your daily activities in and out of the classroom — instructors, advisers, supervisors, and coworkers — can all be productive mentors as you build trust and respect with them over time. And friends and family from back home can be important mentors as well.

Here’s how one former student in the class who was able to put her job research and social networking together to find a great job after graduation with Fortune 500 manufacturer Kimberly-Clark:

I took the Taking Initiative: InterLS 210 course my junior year. At that point I knew I wanted a more business-focused career, but worried my liberal arts degrees could be a turn-off for companies that “only look at business degrees.” Throughout the semester, I realized how proud I was to be a liberal arts student and how I could use it to my advantage in the job-application process.

I worked with L&S Career Services in practicing interviews, learning how to make the Career Fair productive and networking. Throughout my senior year, I became very comfortable setting up informational interviews to make connections and learn about potential career interests. [...] 

The funny story with Kimberly-Clark is that I did not make my first impression at the Career Fair [...] Through my connection’s connection, I emailed the vice president of sales to learn about career opportunities — something I never would have done without practice through the class!
1. Why is it important to research an organization before applying for a job with that organization?

2. What is a “competency-based interview” and how should one prepare for it?

3. What kind of information about organizations or specific career paths can one learn by searching LinkedIn?

4. How can exploring your “career community” help you prepare for an on-campus Career Fair?

5. What is the value of conducting an informational interview? How does an informational interview differ from an employment interview?

6. What is Badger Bridge and how might it be useful to your career development?

7. Why might you want to join a student organization related to your professional goals?
READ MORE ABOUT IT


Sarah Dunham and Lisa Vollmer, *What To Do With Your History or Political Science Degree* (New York: Random House, 2007). Contrary to its title, this book is useful for more than just history or political science majors — the advice applies to any L&S degree.


“So tell me a little about yourself.”

Such a simple question, but how do you answer it when you are trying to impress a hiring decision-maker for a job, or an internship, or a spot on a research team, or even a role in a community-service project? Don’t worry: if you’ve already taken time to critically reflect on your experiences, strengths, and goals, and done the work of systematically researching the position, the organization, and the career it connects to, then together with your broad and deep liberal education experiences at UW-Madison, you’ll have plenty to say as you summarize your career narrative from chapter 1.

Education journalist Jeffrey Selingo, in his recent book *There Is Life After College* (2015), suggested that this career narrative should answer the following kinds of questions:

- What do my work and study experiences in college say about me? Do they reveal my core interests and passions?
- What kind of working environments do I enjoy and do well in?
If you’re taking our course, you’ve already gotten started on this process. Our students create initial résumés and LinkedIn sites right away, honing them bit by bit as they proceed with their critical self-reflections and their career and industry research, and then use these to present a two-minute practice introduction speech on the last day of discussion section. This chapter provides some background on those three most common modes for communicating your value in your career search: in a concise résumé or web posting, through a more open-ended narrative cover letter, and in a realtime, face-to-face discussion.

Building a résumé or web site

You’ve already assembled all of the raw materials for your résumé or web site: you’ve reflected on your experiences, you’ve inventoried your strengths, and you’ve developed some very specific Challenge-Action-Result statements. The more precise (and quantitative) you can be with the entries and bullet points that you list on your résumé and web site, the better.

But while a web site might summarize your “greatest hits” from this list, don’t think of your résumé as simply a laundry list of all of these items; instead, each résumé that you send out to a prospective employer should be a targeted subset of everything you could possibly say about yourself, emphasizing your preparation and enthusiasm for each particular job that you apply for (Crosby & Liming 2009).

Résumés fall into several basic styles:

- **chronological order** List your education and most relevant experiences (both paid and unpaid) with the most recent ones listed first. This style demonstrates upward growth in skill and knowledge.

- **skills categories** In this format you do not list your jobs in reverse-time order, but rather you bundle them into several categories of skills. Only use this for very specific kinds of jobs or industries which demand this format.

- **hybrid chronological and skills** This style combines qualities of chronological and skills résumés. Review your most relevant paid and unpaid experiences for themes, then create 1-3 skill categories and list experiences in reverse chronological order within the categories.

- **graphic chronological and skills** A hybrid résumé which uses graphic techniques and artistic design to communicate experience and skills.
visually. Only use this for graphic-design oriented industries, and only if you are confident in your visual design skills.

Regardless of which style you choose, make sure your résumé includes the following basic elements:

- **Your contact information** including email, professional web site (if any), telephone number (one with voice mail), and physical address.

- **Your education history** including institutions with their location (city/state), dates attended, and degrees earned or in progress. While you should include your GPA if it is outstanding, you don’t have to include it unless the employer specifically asks for it (Terhune & Hays 2013).

- **Your paid and unpaid work history** including organization, location (city/state), dates employed, your title, and a basic description of your responsibilities.

- **Selected non-work experiences or additional skills** that you think are relevant, especially unique volunteer, civic, or personal accomplishments.

As you list experiences and skills on your résumé, try to use ideas from your reflections and specific numbers from your CAR statements to succinctly describe each experience. Try to have each bullet point on your résumé answer an employer’s questions, like “How does this demonstrate that you are willing and able to work here?” or “How would this add value to my organization?” (And be honest; never exaggerate your accomplishments.)

Note that you do **not** have to include an “objective” statement on the résumé — you should save that for your cover letter. And there is no need to spend precious space on your résumé to declare “references available upon request” at the bottom; just bring a list of references with you to any job interview.

Format is just as important as content in a résumé. Until you have built up a substantial work or education history, try to keep your résumé to one page, and use a consistent, readable font throughout (for example, 12 point Times Roman). Adequate margins and the occasional blank line separating sections helps to make your résumé readable. And if you are submitting your résumé electronically, you should submit it as an Adobe “.pdf” file (which stands for “portable document format”) unless the employer specifies a different kind of file format, like Microsoft Word (“.doc” or “.docx”).

Finally, don’t forget the three “musts” of résumé-writing:

1. **Don’t get too personal.** “Do not disclose your health, disability, marital status, age, or ethnicity. This information is illegal for most employers to request” (Crosby & Liming 2009). This may affect whether you choose to include a photo with your résumé. While photos are expected parts of online job sites like LinkedIn, candidates usually omit
photos from résumés (though for jobs in other parts of the world, photos along with résumés are more customary).

2. **Include relevant keywords** that connect to the job and industry you are targeting, since so many résumés these days are pre-screened by computer matching algorithms called applicant tracking software (Pierson 2006; Vilorio 2011; Selingo 2015). Enterprise Rent-A-Car, for example, uses software to “sort through volumes of candidates, generally 50,000 a month, and identify those who meet five or so minimum requirements” for their management training program (Bernard 2016).

3. **Proofread your résumé twice** — and have someone else proofread it for you as well — because just a single typo or spelling mistake can be enough to remove you from consideration when the average employer receives hundreds of responses for a single open job (sometimes spending as little as 30 seconds on their initial screening of each résumé) (Crosby & Liming 2009).

We’ve included a few examples of effective and ineffective résumés below. Remember that at UW-Madison, professors and advisers are more than happy to look over your résumé and provide advice, often providing drop-in, on-demand help through your major department, the **Writing Center**, the **Career Exploration Center**, or **L&S SuccessWorks**.
Sample of a simple, effective résumé

Chris Badger
1234 University Avenue, Madison, WI 53706, 608-555-1234, cbadger@uwalumni.com, linkedin.com/ChristopherBadger

Education
University of Wisconsin – Madison
Bachelor of Arts, May 20xx
Double Major: Psychology and Spanish
Certificate: Business
GPA: 3.2/4.0, Psychology GPA: 3.4/4.0, Spanish GPA: 3.5/4.0
Honors: Dean’s List (2 semesters), Chancellor’s Scholar

Relevant Coursework: Financial Accounting, Grant Writing, Advanced Spanish Conversation

Leadership and Communication Experience

Badger Herald
Communications Intern
September 20xx - Present
Reporter
April 20xx - Present
- Gained valuable media knowledge while honing writing and interviewing skills; write two feature stories per week
- Interacted effectively with fellow staff members and community members, gaining access to exclusive stories

Letters & Science Career Services
Peer Advisor
September 20xx - May 20xx
- Effectively worked with professional staff to create new resources for the office, including information on negotiating job offers,
  different styles of interviewing, and guides for choosing graduate school programs
- Advised students individually on improving their resumes

Noodles & Company
Assistant Manager
Madison, WI
September 20xx - December 20xx
- Arranged scheduling for staff of 35 involving great attention to detail and mediation of conflicting requests
- Entrusted with interviewing, hiring, training, and evaluation of staff, requiring excellent interpersonal communication skills

Atwood Community Center, Volunteer, Madison, WI
- August - December 20xx, May 20xx - Present
- Coordinated events for local children on celebrating all cultures
- Led workshops to help students learn more about their own culture

Freelance Spanish Tutor, Madison, WI
- May - August 20xx and 20xx
- Worked with four high school students to prepare them for international study trips
- Helped students improve Spanish conversational skills

University of Wisconsin Study Abroad, Selected Participant, Oaxaca, Mexico
- January - May 20xx

Skills
Computer: Microsoft Word, Excel, PowerPoint (proficient), Microsoft Access, Adobe Page Maker and Photoshop (familiar), Comfortable using both Windows and Mac operating systems
Languages: Spanish (highly proficient), French (conversational)
Sample: what NOT to do on a resume

Nabil Shah
Room 1000, International House, 500 Riverside Drive, New York, NY 10027, USA.
Tel: 1- 646-222-2222 Email: hotstuff@hotmail.com

EDUCATION
Columbia University, Graduate School of Arts and Sciences, New York, NY
MA in Statistics (I expect to graduate in May of 2009)
University College London, University of London, United Kingdom
BS in Economics, June 2008
1st Class Honors Obtained
The Chinese University of Hong Kong, Hong Kong
Economics Summer Program, July - August 2004

Professional Experience
Intern, Credit Derivative Operations Support
• Liaised with colleagues in other departments
• Responsible for prioritizing client requirement
• Responsible for preparing trade confirmation for various types of Credit Derivatives
• Responsible for obtaining structured product training

ABN AMRO ASSET MANAGEMENT (ASIA) LTD, HONG KONG, SUMMER 2007
Intern, Financial Controlling Support
• Prepared balance sheets and P&L reporting; enhanced the efficiency of the division
• Prepared presentation materials for senior management
• Assisted team on various projects

ABN AMRO ASSET MANAGEMENT (ASIA) LTD, HK, JUNE – AUG 2005
Summer Intern, Product Development and Operations Support
• Collaborate with Product Development, Operations and IT teams to update database system
• Implement database system for Product development and Operations departments

Logistics Information Network Enterprise Limited, HK, May – Aug 2006
(Logistics member of the Hutchison Port Holdings Group)
Intern, Accounting & Finance, Logistic Management Support
• Provided consistent support for daily logistics process
• Worked proactively to follow up on issues for the departments; contributed to the productivity of the team

Skills
Fluent in English, Cantonese and written Mandarin.
Proficient in MS Office (Word, Excel, Outlook, Access, Power Point), Stata, Visual Basics

Activities
Volunteer, Cultural Hour Event (two hundred member audience at International House), New York, 2008; Trainer, New Jersey Marathon for April 2008.

***References: Available when requested

Notes:
• Fonts: Avoid “fancy” fonts. Use same font throughout the resume. There should be no period after the name.
• Email: Use a professional e-mail, preferably your Columbia address.
• Pronouns: Do NOT use first person pronouns, such as “I” and “we.”
• Font Size: Keep font size and font type consistent throughout resume. “Coursework” should be singular.
• Consistency: This is imperative on the resume. Do not indent one line where you have not indent others with the same information.
• Spelling: Mistakes are unacceptable.
• Descriptions: Avoid using the same passive phrase repeatedly. Instead, use action-oriented verbs to begin phrases. Be more descriptive and specific with tasks.
• Dates: Be consistent in displaying dates. Seasons can be appropriate for seasonal positions. If abbreviating months, use same format for all.
• Titles/Bullets: Titles should be consistent; if you use italics for one title, use italics for all. Bullets must be aligned throughout.
• Language: If applying for positions in the US, do not include English as it is assumed. If applying abroad, it can be appropriate.
• Products: PowerPoint is one word, with no space.
• References: Do not list references on the resume. There is no need to have a line indicating references are available. It is assumed.
Sample visual résumé for a graphic design field

**adrienne robenstine**
**GRAPHIC DESIGNER • MARKETER • CREATIVE VIRTUOSO**

**123.456.7890**
*a.robenstine@gmail.com*

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**I AM A GRAPHIC DESIGNER**

Pre-press, digital and offset print production.
Web design, creation, maintenance and flash animation.
Deadline driven and oriented.
Comfortable working in high pressure situations.
Cohesive brand identity and logo creation.
Innovative and on the cutting edge of technology.
Extensive marketing budget management.

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**SELF EMPLOYED**
**Geneva, Ohio**

**Graphic Designer, Marketing Professional, Photographer**

2007-Present  Worked various projects including logo design and reconstruction, business cards, brochures, wedding invitations, direct mail pieces and postcards. I have worked with such clients as World Kitchens of California, The O’Nama, Hildreth Distributing Company and many others. Helped design cohesive marketing plans to increase business and revenues.

**MONT GRANITE, INC.**
**Selma, Ohio**

**Marketing Director & Graphic Designer**

2010-2011  I handled the marketing efforts and graphic design for three different locations. I created a company wide cohesive brand appearance, designed and maintained all internal print publications as well as creating ads and advertising in several publications. I designed a 10 x 10 trade show booth and organized and presented at several trade shows in all of their markets. Research new technology and supplied social media marketing to all dealers. Initiated Off-set marketing into all print ads as well as on all employee business cards. Created a statue of the art website including an extensive material search and database. Developed an industry first way of streamlining graphic slides to re-purpose material for homeowners to look at in their home.

**PIP PRINTING & MARKETING SERVICES**
**Mentor, Ohio**

**Art Director / Graphics Designer**

2008-2010  Worked as the head of the Graphics Department. Designed all pieces as well as running pre-press and production. Designed a variety of pieces ranging from Business Cards, Brochures, Memois, Postcards, Envelopes, Direct Mail pieces, etc. I created an archival system for client files and ran servers back up for secure file storage. I created, edited and led out as well as editing and manipulating photographs for full color 155 page book by a local author. Handled and maintained social media marketing.

**POIRAT PRINT SOURCE**
**Cleveland, Ohio**

**Graphic Designer**

2007-2008  Worked with several high level clients such as local radio stations and charitable organizations. Created unique designs for business cards, brochures, calendars and direct mail pieces. Prepared files for digital and 4-color print production including dupilating color plates and tuming color techs. Gained valuable experience in pre-press machinery. Maintained file archival and storage.

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**COMPUTER KNOWLEDGE**

Proficient in both Mac and Windows operating systems.

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**SOFTWARE**

- **Adobe**
  - Acrobat
  - After Effects CS6
  - Dreamweaver CS6
  - Flash CS6
  - Illustrator CS6
  - InDesign CS6
  - Photoshop CS6
  - Premiere Pro CS6

- **Quark**
  - QuarkXpress

- **Microsoft**
  - Excel
  - PowerPoint
  - Word

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**MEMBERSHIPS**

NAPP • AIGA • CDPUG

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**EDUCATION**

The University of Akron
Class of 2007

Major: Graphic Design
Minor: Professional Photography & Marketing

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**PORTFOLIO AND REFERENCES AVAILABLE UPON REQUEST**

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(Morgan 2014)
Once you have a résumé that you are proud of, you can post it online to various web sites and job boards, and you can use your résumé as a template for creating your own web site or filling in career information on a service like LinkedIn. But remember, the web allows room for more space and supplemental materials than just a single sheet of paper. You might consider enhancing your online résumé through an electronic portfolio — an online record of your academic, artistic, workplace, or service accomplishments — in the following ways:

- Upload letters of recommendation you have received (but make sure your recommenders agree to have their references posted in this way first).

- Upload copies of university course assignments or other intellectual products that you are particularly proud of, to use LinkedIn as a sort of electronic portfolio showcasing your best work.

- Upload copies of work projects that you are proud of — but be careful! Make sure to receive permission first. Instead, you may want to create a "mock up" of a work project that you’re proud of, to indicate the scope of what you’ve done without revealing proprietary or personal information from your previous employer.

Here at UW-Madison, we have several tools available for creating such a portfolio. You can use our learning management system, Canvas, to create an “ePortfolio” from your main account screen. Or you can use the UW’s subscription to Google Sites to create an online portfolio using that service.

In any case, don’t let your online presence go “stale” — any time you update your printed résumé, update your online materials as well.

**Writing a cover letter**

According to the career experts at the *Occupational Outlook Quarterly*, “Sending a résumé without a cover letter is like starting an interview without shaking hands” (Crosby et al 2009). But writing a cover letter is a lot harder than shaking hands, unfortunately. If you find that writing is a challenge, remember that cover letters often conform to an expected format or genre that is rather straightforward. For example, one career guide recommends a simple three-paragraph structure (Basalla et al 2015):

1. **Introduce yourself** and express your interest in the job.” (A good rule of thumb is that the very first sentence should clearly state why you are writing and what specific position you are applying for.)
2. “Highlight two or three particularly **relevant pieces of experience** that you know, based on your research [...], will be of interest to the employer.” (Think of these as little stories — your CAR statements can help here.)

3. “**Close** by saying that you’ll follow up within a week.” And make sure to express thanks for the reader’s time!

This is very similar to the advice that LinkedIn offers students for creating cover letters: “Bring your skills and qualifications to life by putting your career path in story form. Develop a strong opening paragraph that outlines your strongest skills. Next, describe how those skills map to the role you’re applying for. Finally, describe where your skills, personality and unique talents will take you.” (LinkedIn, 2018)

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**Suggested cover letter format**

**OPENING Paragraph**
- Clearly state the particular position for which you are applying
- Include information about how you learned of the particular position or company
- Capture the reader’s attention by displaying the knowledge you have gained from your research
- Describe & connect why you are interested in working for the company this type of work
- “Name drop” if someone referred you to the position.

**BODY Paragraph(s) — You can have 1-2 body paragraphs**
- Describe your educational background including: University name – Degree – Major – Graduation date
- Describe & connect college activities, work experience, skills you have gained relevant to the position
- Illustrate through specific examples how you will be an asset
- Use key words from the job description and focus directly on the skills/qualifications that the company/program is looking for

**CLOSING Paragraph**
- Express your interest in an opportunity to interview
- State that you also have enclosed your resume with additional information
- Invite the employer to contact you by including your phone number, e-mail address
- Indicate a follow up plan (e.g., “I will follow up in two weeks to check on the status of my application”); use only if you’re willing to make the call.
- Show appreciation by thanking the employer for their time / consideration

(UW-Madison School of Human Ecology, 2017)

You should always try to address a cover letter to a named individual rather than to an unnamed “hiring manager” or “to whom it may concern.” If you’ve researched the organization and job that you’re applying for, you should be able to come up with a specific person to contact. Make sure to spell the person’s name correctly and to use their correct job title!

Besides clearly explaining why you’d be a good fit for the position, the cover letter works a bit like an interview: it demonstrates to the reader whether or not you’ve researched and understood the organization you’re applying to. This is one reason that you should never use a generic cover letter; just like...
with your résumé, always tailor it to each particular opportunity. One effective trick is to go back through your cover letter and highlight all of the words and terms that appear in the original job advertisement or position description that you are applying to, to demonstrate congruence between what the organization needs and what you are claiming to offer.

Sample cover letter with key aspects from job advertisement highlighted

September 23, 2013
Amy Capes
Senior Recruiter
Target Stores
1090 73rd Avenue North East
Fridley, MN 55432

Dear Ms. Capes:

I am writing to express my interest in the Executive Intern position with Target Stores for Spring 2014. I learned of this position through my career advisor and am very enthusiastic about expanding my knowledge of the retail environment at a company as well-known and respectable as Target. I have always had a strong interest in a career in retail, and I believe my educational background, prior experience, and passion for the industry make me an exceptional candidate for the Executive Intern position.

I am currently a senior pursuing a Bachelor of Science in Retail from the School of Human Ecology at the University of Wisconsin-Madison. Through my coursework, I have learned a lot about general business, but also about theory and practice as it relates to the retail environment. I have developed a greater understanding of the industry through my involvement with the Student Retail Association, in which I have had the opportunity to network with peers and professionals in the field. I am currently the Vice President of the student organization and have had many opportunities to provide innovative ideas and collaborate with the leadership team to provide meaningful experiences for others within the organization. I am also an active member of Badger Acts of Kindness, a student organization dedicated to performing acts of kindness on campus and in the community. I have demonstrated my ability to prioritize and multitask by maintaining an active role within these organizations, working 25 hours per week, and maintaining a 3.89 GPA within my major courses and an overall GPA of 3.61.

While I have been working in the service industry for six years, my interest in retail truly peaked when I took my current position with Anthropologie. I have been employed as a Sales Associate there for nearly three years and have learned a great deal about retail environments through this role including sales, human resources, inventory management, and guest services. My communication skills have dramatically improved due to the need for me to provide exceptional customer service to all guests of the store, and I have excelled at working on a team through my role in helping train and oversee other Sales Associates. The skills and knowledge I have gained have solidified my passion for retail, so I look forward to the possibility of furthering my career with Target. Please view my enclosed resume for additional details on my professional experiences.

I am genuinely excited about the Executive Intern position with Target and hope to discuss my qualification with you. Please contact me at 608-555-7862 or heartcarrri@wisc.edu if you need additional information or if you wish to set up an interview. I appreciate you taking the time to review my materials and look forward to your response.

Sincerely,

(UW-Madison School of Human Ecology)

Students often wonder how long a cover letter should be. In general, a one-page cover letter that highlights relevant information from a résumé is appropriate. However, if you have a particular connection to an organization (like a previous internship experience) or a unique accomplishment that is
relevant to the position (such as a previous college project), you may want to go into a bit more detail to make that clear to the reader.

Remember, in the end, the goal of a cover letter is to “reduce the risk of employing you by showing that you have done similar work before, that you have the relevant skills, that you understand the mission, and that you are eager to be a part of this group” (Basalla et al 2015).

Talking about yourself in person

All of the written and online efforts to communicate your value really have a single goal: to get you an interview with a hiring decision-maker where you can demonstrate your excitement and experience in person. But an interview is by definition an impromptu and imperfect situation. For example, Selingo (2015) reminds us that “At most companies, this is a highly subjective process, done mainly by managers with no experience or training in interviewing or hiring.” Expectations for how many interviews are appropriate, and what form those interviews will take, vary across different occupations, industries, and organizations. And these norms change over time, as well — Google “once administered up to 25 interviews for each job candidate,” but today they only interview each candidate four times (Thompson 2016). How do you prepare for such an unpredictable situation?

Interviewing, just like public speaking, can be nerve-wracking. But also like public speaking, you can practice your interviewing skills and improve them. For example, a succinct introduction — what we might call a personal brand pitch (as we saw in chapter 6) or an elevator pitch (from the idea that you quickly narrate it to a decision maker when you happen to find yourself standing on the elevator with her) — can set the tone for a productive interview, especially when the first question is an open-ended one like “Tell me a little bit about yourself and why you want this job.”

One trick for organizing your introduction is what Kathryn Minshew, CEO of The Muse, calls the present-past-future formula: “first you start with the present—where you are right now. Then, segue into the past—a little bit about the experiences you’ve had and the skills you gained at the previous position. Finally, finish with the future—why you are really excited for this particular opportunity” (Minshew 2016). She offers this example:

Well, I’m currently an account executive at Smith, where I handle our top performing client. Before that, I worked at an agency where I was on three different major national healthcare brands. And while I really enjoyed the work that I did, I’d love the chance to dig in much deeper with one specific healthcare company, which is why I’m so excited about this opportunity with Metro Health Center.
In telling your career story in this way, you should strive to be conversational, but clear. It is important to remember that your interviewer will likely not share your experiences, so be careful not to make assumptions about how someone else might interpret the meaning and value of your various courses, volunteer roles, or previous jobs. As author Meg Jay suggests, you want to remember that in a formal interview, you’re not simply chatting with one of your “strong ties” (from chapter 6), but rather trying to explain yourself to a new “weak tie” who will share less of your own background: “Because close-knit groups of strong ties are usually so similar, they tend to use a simple, encoded way of communicating known as restricted speech. Economical but incomplete, restricted speech relies on in-crowd colloquialisms and shortcuts to say more with less.” But “Weak ties, on the other hand, force us to communicate from a place of difference, to use what is called elaborated speech. Unlike restricted speech, which presupposes similarities between the speaker and the listener, elaborated speech does not presume that the listener thinks in the same way or knows the same information. We need to be more thorough when we talk to weak ties, and this requires more organization and reflection.” (Jay 2012)

In her book Put College to Work, Kat Clowes (2015) has a nice description of how to approach this kind of conversation in the context of a career fair:

Remember to practice your spiel beforehand, so it flows off your tongue and seems (and feels) natural. Don’t try to do it all in one breath; make it conversational. You might comment about the company and a little of your research first and then offer your hand to introduce yourself. At that point, the person in the booth will ask what you’re majoring in and the second part of your elevator pitch will happen naturally. If they then ask about your experience, you follow up with the third part of your pitch. Give it time and practice. You don’t want to sound like an eager kid at a birthday party, trying to recite everything you’ve done that day. Keep it relaxed and try not to be nervous. Remember, you’re pitching your personal brand.

Finally, remember that in many ways the job interview is not about you — it is about the employer. You are being evaluated not only on the basis of how you might fill an already-identified employer need, but also on the basis of how you might add value to an employer in surprising and unexpected ways. This means that you need to demonstrate that you understand the employer’s mission, history, and goals. In short, you have to ask good questions. As one of the leaders of Google explains it, “People who ask good questions are curious, smarter, more flexible and interesting, and understand that they don’t have all the answers — exactly the type of smart-creative characteristics you want.” (Schmidt et al 2014) How do you make sure you come to an interview with good questions? That’s where all of the research from chapter 7 comes in. But while preparation can help, in the end, describing yourself
and your value succinctly and communicating your interest and enthusiasm for an employer are skills that must simply come from practice, practice, and more practice.

How hiring really happens

All of these communication strategies are necessary in a successful job search — and they remain necessary after you land that first job, as your career unfolds through new opportunities in different organizations with different expectations. But not all job searches proceed through the same process, and not all hiring happens in the same way. This is especially true in the highest-demand jobs, occupations, and workplaces. At Google, for example, where senior leadership tells managers that hiring is “the single most important thing you do,” only 0.2 percent of applicants are hired — an acceptance rate “1/25th that of Harvard University” (Schmidt et al 2014; Thompson 2016). And most organizations, unlike large global firms like Google, do not plan very far in advance for their hiring needs (Selingo 2015). In other words, even for employers, the hiring process is still more art than science.

In his recent book The Unwritten Rules of the Highly Effective Job Search, career consulting Orville Pierson (2006) described three basic types of hiring:

- Through gathering an applicant pool, where a job is advertised and résumés are collected and screened to select interview candidates. While Pierson estimates that about 25% of all hiring happens this way, this strategy is most effective “for candidates looking for the same kind of work they are currently doing or did in their last job” and “who also have strong credentials that can easily be displayed on paper”.

- Through creating a new position, where you approach your current employer and together build a new job based around your skills, interests, and aspirations. This is a wonderful, entrepreneurial way to grow your career by demonstrating a new way that you can add value to an organization that you’re already a part of; however, Pierson estimates that less than 5% of hiring happens this way.

- Through hiring an already-known candidate who didn’t apply through an open applicant pool, but who also hadn’t previously had a permanent position with the organization. Since Pierson estimates that roughly 75% of all hiring happens this way, he recommends a simple strategy: “‘Most people set up a job search to look for job openings,’” but “most hiring decisions happen before there is an opening.” Thus, “You need to talk to people who are NOT hiring right now.”

Pierson’s description of the hiring process is of course based on his own experience in the world of business personnel management, and even though his estimates of how often different types of hiring processes occur will vary
depending on industry and occupation, the key point is that all of your networking, information-gathering, and communication strategies should ideally reinforce each other, because there’s never only one possible path to your next opportunity.

The most important advice to remember from our course with respect to the hiring process is to take advantage of your campus resources while they are available to you. In a recent survey of corporate recruiting trends by scholars at Michigan State University, a survey of over 4,000 employers revealed that while many are now turning to vendors like LinkedIn in order to assemble pools of possible job candidates, their main tool for recruiting was still simply “posting a job announcement in places where candidates can easily find it,” especially “the organization’s website and the college or university’s career management system.” (CERI 2017). So make sure to go to career fairs and interview days. On-campus recruiting, sponsored by your college career services office and/or your major department, is still an important route to that first job. However, on-campus recruiting has changed dramatically over the decades. As Jeffrey Selingo (2015) described, “In the 1980s, campus recruiting was dominated by three primary industries—manufacturing, retail, and finance—and a few big corporations controlled each of those sectors.” But now there are a wider variety of smaller employers, “each of them recruiting fewer students, and all have specific needs and different timetables for students to keep track of.” Even for those big employers, though, the diversity of their hiring needs has increased. According to a top manager from consumer goods giant Procter & Gamble, in one recent year they hired students from 86 different majors at a single university (Selingo 2015). As we saw in chapter 5, this is good news for flexible, adaptable liberal arts and sciences majors.
REVIEW QUESTIONS

1. What are the different strategies that job candidates generally use to organize a résumé? What are the risks and benefits of each?

2. What is “applicant tracking software” and what does it mean for the way you should construct your résumé?

3. What is an “electronic portfolio” and why might a job-seeker want to create one?

4. What are the three basic parts of a cover letter and how specific should they be?

5. What is an “elevator pitch” and why is it useful to have one? Describe an effective strategy for crafting such a pitch.

6. What estimated percentage of hires are made as a result of outside applications to job ads versus hires made as a result of inside recruiting of candidates already known to the organization?
READ MORE ABOUT IT


Hannah Morgan, *The Infographic Résumé* (New York: McGraw-Hill, 2014). Nice resource for students in statistical or graphic design fields who would like to use more visuals on their résumé.


9 Supporting diversity, inclusion, and creativity

“Inclusion inspires innovation.”

This is not merely an empty slogan: it is part of the mission statement of Apple, Inc., the most profitable company of all time, according to *Fortune* magazine (2015). In the words of Apple CEO Tim Cook (2016):

> We want every person who joins our team, every customer visiting our stores or calling for support to feel welcome. We believe in equality for everyone, regardless of race, age, gender, gender identity, ethnicity, religion, or sexual orientation. That applies throughout our company, around the world with no exceptions.

However, declarations of non-discrimination and calls for equal opportunity do not by themselves produce the kind of representative social institutions (especially schools, workplaces, and governmental organizations) that would demonstrate a truly inclusive society. In this chapter we explore some of the
reasons why — and some of the tools available to help us to change this situation, to bring the benefits of diversity to our workplaces and our lives.

From monoculture to diversity

Social scientist Danielle Allen uses the metaphor of a monoculture to analyze this lack of diverse representation in so many parts of our society today: “In the United States generally, demographic diversity is indeed a fact. It has been a feature of this country’s makeup since the founding.” But “that same level of diversity does not necessarily appear in the millions of organizations — businesses, churches, organizations, and associations — that populate civil society. To the contrary, in many sectors we continue to observe a high rate of monoculture across organizations and institutions.” (Allen 2016)

Apple is no monoculture, but it has a long way to go before its own employee demographics could be considered roughly comparable, at all levels of corporate organization, to the demographics of the societies in which it operates. Globally, for example, only 31% of the company’s employees are female, compared to nearly 50% of the global population that is female, according to the World Bank (2016). Demographic gaps like this are not due to women choosing to exclude themselves from the waged workforce; at the turn of the millennium, 75% of US women aged 25 to 44 were employed, and that proportion has only increased since then. Yet women remain “seriously underrepresented in scientific and technical careers” (Betz 2005). In the so-called STEM fields that “new economy” companies like Apple draw upon — science, technology, engineering, and math — only 26% of the US workforce was female in 2010 (Schenck et al 2012). And even women who do find employment in STEM fields face yet another barrier: they are paid, on average, between 82% and 87% of what men are (American Association of University Women 2015).

Within the United States, Apple’s workforce is a diverse one in terms of overall race and ethnicity — currently only 54% of Apple’s employees are White, compared to 72% of the US population as a whole as of 2010 (Apple 2016; US Census 2016). However, it is unclear whether people of color are proportionally represented in the highest-earning ranks of Apple’s management, marketing, and engineering professionals. In the overall US economy, census numbers from the turn of the millennium were not encouraging: “Hispanics and African Americans were overrepresented in ‘service occupations’ (20% and 22%, respectively, compared to 12% of Whites) and ‘operators, fabricators and laborers’ (21% and 18%, respectively, compared to 13% of Whites)” (Worthington et al 2005). As with women, people of color are also underrepresented in STEM fields in the US; only 6%
of STEM jobs were held by African Americans and only 5% by Hispanics in 2010 (Schenck et al 2012).

If left unaddressed, such disproportionalities will only become more troublesome because the demography of the US as a whole continues to change. The Bureau of the Census estimates that by 2044 the nation will be a **majority minority** country, meaning “more than half of all Americans are projected to belong to a minority group (any group other than non-Hispanic White alone)” (Wan & Kaplan 2017; Colby et al 2015). This movement to a more diverse population is most evident in urban areas, which are the economic centers of the high-tech economy (and of the college labor market discussed in chapter 2): “In 2010, 22 of the nation’s 100 largest metropolitan areas were minority white, up from just 14 in 2000 and 5 in 1990.” (Frey 2016) And since much of the growing diversity of the US is represented by young people, the high-tech industry in particular needs to be attentive to what demographers call a growing **cultural generation gap**, the difference in experience and outlook “between the diverse youth population and the growing, older, still predominantly white population.” (Frey 2016) Thus Apple, and other leading new economy companies like it, continue to pledge publicly to work toward a more representative workforce.

![Labor force makeup by race/ethnicity, projected to 2050](image)

(Carnevale & Smith 2016)
With a brand like Apple’s, catering to an upscale, global, highly-educated target market of consumers, we might question whether this political stance in favor of diversity and against discrimination is simply a feel-good marketing strategy — especially since, as workforce scholar Anthony Carnevale notes, “an increasingly diverse customer base will be unwilling to do business with institutions that exclude them.” (Carnevale & Smith 2016)

But Apple, like other Fortune 500 companies, is pursuing a diverse workforce over the long term for more than merely public relations reasons. Research on innovation demonstrates clearly that diverse teams often “make higher-quality decisions, identify better solutions to work problems, and achieve greater creativity and innovation” than homogenous teams, because the members of a diverse team bring a greater range of information and experience to a problem (van Knippenberg et al 2013). Or, as one of the leaders of Google recently put it, “People from different backgrounds see the world differently. Women and men, whites and blacks, Jews and Muslims, Catholics and Protestants, veterans and civilians, gays and straights, Latinos and Europeans, Klingons and Romulans, Asians and Africans, wheelchair-bound and able-bodied: These differences of perspective generate insights that can’t be taught. When you bring them together in a work environment, they integrate to create a broader perspective that is priceless.” (Schmidt et al 2014)

This should sound familiar: it is similar to the idea from chapter 6 that the “weak ties” in your social network (the acquaintances who are most different and/or distant from you) will often actually have the most unique and valuable information for you as you pursue your job search. As Danielle Allen puts it, “Everyone is benefited by a rich social network and harmed by a relatively isolated or resource-impoverished social network. [...] More egalitarian societies, scholars have shown, are generally more connected societies, and connectivity is equalizing.” (Allen 2016) In this way, avoiding discrimination and embracing diversity on the job (and in the job search) is not just the right thing to do — it is the competitive advantage that companies will need to survive.

Unfortunately, the research on diverse teams has a downside: When individuals in diverse teams don’t understand or appreciate the value of their diversity, their performance can actually decrease, as members fall into “us” versus “them” factions that thwart cooperation and trust (van Knippenberg et al 2013). Allen argues that organizations need to invest in what she calls the art of bridging in order to bring diverse groups characterized by weak ties together: “bridging ties do not arise merely by virtue of assembling a group of people characterized by demographic diversity in a single location. Bridging ties emerge when individuals are able to interact successfully across boundaries of difference. They emerge when people have been able to convert an initially costly social relationship into one that brings mutual benefit.” Thus it is not enough to simply assemble teams of employees from diverse
backgrounds; firms must cultivate a climate of inclusion and respect in order to reap the competitive benefits of that diversity.

**Occupational segregation and gender stereotyping**

A student’s trajectory into a career — starting with their major and continuing through any certificates, internships, or other high-impact academic or extracurricular experiences — is in one sense an individual and idiosyncratic choice. But at a group level, we can see some persistent patterns in those choices that correlate to demographic categories of diversity. It is important to understand such patterns, and to consider the cultural expectations or structural limitations which may motivate or constrain the individual choices that make up those patterns.

One of the most important categories for analyzing major and career choice is a student’s **socioeconomic status** or **SES** — a term referring to the aggregate resources at one’s disposal, based not just on the student’s income and wealth, but also the educations, occupations, and geographical locations of the student’s parents or guardians. As early as the 1960s, in a study of over 30,000 college students, James Davis found that the higher one’s SES, the more likely one would choose a career in humanities, medicine, law, physical, biological, and social sciences and the less likely one would choose a career in engineering, education, and business (Goyette & Mullen 2006). A recent study from the early 2000s found similar results, concluding that “Low-SES students are more likely to choose vocational majors even after other factors like tested proficiency, college characteristics, expectations, and work values have been considered. High-SES students choose [arts and sciences] majors” (Goyette & Mullen 2006).

These kinds of choices might be understood using some of the models for the college labor market that we discussed in chapter 2. For example, low-SES students might be making a rational economic choice under “human capital theory” to take the most direct route to an economically secure, vocational career. On the other hand, they may also face the kinds of structural limitations posited by “segmentation theory” so that their choice of vocational majors is made without the kind of information and experience that a high-SES student would have had access to while growing up. Researchers still debate to what degree our choices in the job market may be attributed to the freedom of personal “agency,” and to what degree those choices are constrained, channeled, or even determined by the “structure” of the imperfect society that we find ourselves living in.

Nowhere is this dilemma more acute than when considering the combination of career choices and cultural expectations that result in certain occupations employing a disproportionate amount of women versus men — what scholars call **occupational sex segregation**. Recall that one of the biggest
transformations in the labor market over the last fifty years, especially in terms of college-educated workers, has been the entrance of women into the paid workforce. Just compare: “In 1973, less than 44% all women were employed, constituting only 38% the total workforce. In contrast, by March 1996, more than half the U.S. workforce was female, and nearly 60% American women were employed” (Fitzgerald et al 2001). But this numerical increase has not been evenly spread throughout all industries and occupations. For example, two scholars in the Journal of Higher Education (Goyette & Mullen 2006) point out longstanding gendered patterns of choosing college majors: “Men have traditionally concentrated in fields such as business, engineering, chemistry, and physics while women have studied education, humanities, nursing, and psychology.” By the early 2000s, “more than 90% of preschool and kindergarten teachers, dental hygienists, secretaries, child-care workers, cleaners and servants, nurses, occupational and speech therapists, and teachers’ aids [were] women,” according to the US Department of Labor (Betz 2005).

While it is true that many women select sex-segregated careers, we must recognize that those selections are made with differing degrees of freedom given our culture’s widespread gender essentialist stereotypes — beliefs, biases and assumptions that the proper roles of men and women in society are necessarily and permanently separate and unequal. Gender essentialist stereotypes often claim that men and women have different innate strengths or weaknesses that directly affect or predict their workplace performance. You’ve no doubt heard these “urban legends” about gender: that men are genetically less “caring and nurturing” in their relationships, that women are genetically less “mathematical and spatial” in their thinking, and that between them men and women have irreconcilably different communication styles. Such stereotypes can to be held by both men and women — and they can be very slow to change. One study found that “Children learn these stereotypes at ages as young as 2 to 3 years old and begin to incorporate gender roles into their considerations of careers at ages 6 to 8” (Betz 2005).

The reason we classify such ideas as stereotypes is the fact that research by psychologists and sociologists over the last few decades has demonstrated repeatedly that “men and women are basically alike in terms of personality, cognitive ability and leadership.” In fact, one of the leaders of this research, Janet Hyde, is a professor here at UW-Madison. In response to the stereotypes of gender essentialism that permeate our culture, her research has developed and defended the gender similarities hypothesis: the idea that “males and females from childhood to adulthood are more alike than different on most psychological variables,” and that most differences which do appear “seem to depend on the context in which they were measured.” Hyde cites one striking study as an example where subjects “were told that they would not be identified as male or female, nor did they wear any identification,” and as a result “none conformed to stereotypes about their sex when given the chance to be aggressive. In fact, they did the opposite of what would be
expected — women were more aggressive and men were more passive.” (APA 2005; Hyde 2005)

It is crucially important to appreciate how much of the peer-reviewed research shows such gender stereotypes to be false, because those stereotypes can have such large negative effects on girls and women over their lifetimes. For example, take the stereotype about math ability based on gender (a stereotype which Professor Hyde’s own research has repeatedly debunked). A 1973 study of freshman students at the University of California-Berkeley revealed that “only 8% of the women, versus 57% of the men, had taken four years of high school math. […] Thus, 92% of the freshmen women at Berkeley were prevented by lack of math background from even considering 15 of the 20 major fields” (Betz 2005). Such stereotypes around quantitative knowledge, and their effects on the resulting patterns of majors for men and women, still persist today, even at the most selective of universities; for example, a recent study found that “men earn almost 80 percent of the degrees in economics at Yale and over 70 percent of the philosophy, math, and computer science degrees. Conversely, women earn over 70 percent of the sociology, psychology, and anthropology degrees” (Mullen 2010). Fortunately, there is progress being made. In fact, right here at UW-Madison, more female mathematicians teach, mentor and conduct research than at nearly any other major math department in the country. These scholars are not only helping to change the face of math here and now, but also making it easier for the next generations of women to pursue the path. Disentangling individual agency from structural constraints in these situations can be difficult — we don’t want to dissuade talented students from pursuing the social sciences, for example, no matter what their gender — but at the very least, we can do our best to help break down barriers to women’s ability to participate in the STEM fields if they so choose.

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The women of UW-Madison math

Tullia Dymarz, geometric group theory • Autumn Kent, geometry and topology • Qin Li, applied math • Gloria Mari-Beffa, math physics and differential geometry • Julie Mitchell, computational mathematics • Leslie Smith, applied math • Betsy Stovall, analysis • Lu Wang, geometric analysis • Melanie Matchett Wood, number theory

UW-Madison (2017)
Even with more proportional participation in the most high-paying fields, however, the combination of occupational segregation and gender stereotypes still leaves us with a disturbing, and persistent, economic statistic: the gender wage gap, or difference in average earnings between men and women, even when controlling for education, experience, and occupation. As reported by the New York Times recently (2015), “In 1963, when President John F. Kennedy signed the Equal Pay Act, a woman working full time year-round typically made 59 cents for every dollar paid to her male counterpart. By 2013, the latest year of available census data, it was 78 cents on the dollar.” Even avowedly progressive “new media” high-tech companies are not immune from these patterns; in 2017 the US Department of Labor charged Google with allowing “systemic compensation disparities” between the men and women it employs — a situation which, since Google is a major government contractor, may violate federal employment laws (Levin S 2017). This example reminds us that, unfortunately, a college education is no solution to the gender wage gap problem, even though 57% of all college degrees now go to women versus men: “The higher the level of education, the bigger the gap” (Twenge & Campbell 2010; NYT 2015).

Even in high-paying STEM jobs, a gender pay gap persists

As we have seen, occupational segregation and gender essentialist stereotypes help to explain much of this persistent wage gap. However, we must also consider the effect of family responsibilities outside of paid work, at different
stages of one’s life, which themselves differ by gender in our society — and which also fall into longstanding stereotypes. Writing in the New York Times, Jill Filipovic (2016) points out that “Women’s earnings peak between ages 35 and 44 and then plateau, while men’s continue to rise.” Part of the reason for this is rooted not just in attitudes about the value of female workers, but also in attitudes about the way motherhood and fatherhood should unfold in contemporary society: “When women have children, they’re penalized: They’re considered less competent, they’re less likely to be hired for a new job and they’re paid less. For men, having a child helps in hiring and pay” (Filipovic 2016). This bias is only exacerbated the higher the woman’s occupational status is: “women in high-paying, demanding jobs, like doctors or lawyers, are more harshly penalized for time spent away from the office, and clients” (White 2016). And remember, these effects are in addition to the other cultural assumptions about women’s and men’s roles that result in women Shouldering greater burdens of unpaid work in the home: “In the United States, women spend about four hours a day on unpaid work, compared with about 2.5 hours for men. The difference starts early: American girls ages 10 to 17 spend two more hours than boys on chores each week” (Miller 2016).

Implicit bias and cultural fit in the hiring process

Despite their best intentions, even organizations that overtly celebrate their respect for diversity in terms of gender, race/ethnicity, socioeconomic status, and all the other important categories of human culture and experience that we might list, can fall prey to practices and processes that end up reproducing disparities rather than realizing the benefits of diversity. The research demonstrates this unambiguously. As Nicholas Kristof relates in the New York Times, “When researchers sent young whites and blacks out to interview for low-wage jobs in New York City armed with equivalent résumés,” not only were whites twice as likely to get callbacks than blacks, but “a black applicant with a clean criminal record did no better than a white applicant who was said to have just been released from 18 months in prison” (Kristoff 2016). In another study, from 2003, “researchers sent thousands of résumés to employers with openings, randomly using some stereotypically black names (like Jamal) and others that were more likely to belong to whites (like Brendan)” (Kristoff 2016). The result? “Résumés with White names required about 10 submissions to get one callback, whereas résumés with African American names needed about 15 submissions to get one callback, a 30% advantage for people with White-sounding names” (Worthington et al 2005). Such disparities have been found repeatedly and consistently in these sorts of social science audit studies over the past decades: “they revealed average net estimates of 16 percent favoring White over Black job applicants and 14 percent favoring White over Hispanic applicants” (Banaji & Greenwald 2013).
But not just persons of color are at risk for prejudicial treatment in the job-seeking process. The same sorts of personal networking and referrals that we have stressed are so important to build one’s career (in chapter 6) can be a source of unconscious bias and discrimination in hiring based on a combination of race/ethnicity, gender, and socioeconomic status. As reported recently in the *Atlantic*, “Many industries — tech and media, for starters — are infamous for disproportionately hiring white, upper-middle class young men who went to elite colleges. Relying exclusively on referrals could deepen workplace homogeneity” (Thompson 2016).

Whatever information you provide about yourself to potential employers online, that “you” who they see is only a **digital puppet** — the limited representation of your experience and value constructed by the traces you leave in the digital realm. Decision-makers will inevitably bring their own preconceptions, assumptions, and, sadly, prejudices to bring that digital puppet to life in their minds — even despite their best efforts not to do so. Thus your online social media profile may be a big part of what recruiters or employers use to decide whether you are a **cultural fit** for their organization. As Northwestern University management professor Lauren Rivera (2015) explained, “The concept of fit first gained traction in the 1980s. The original idea was that if companies hired individuals whose personalities and values — and not just their skills — meshed with an organization’s strategy, workers would feel more attached to their jobs, work harder and stay longer.” Rivera reports “80 percent of employers worldwide named cultural fit as a top hiring priority.”

“But cultural fit has morphed into a far more nebulous and potentially dangerous concept,” Rivera continued. “It has shifted from systematic analysis of who will thrive in a given workplace to snap judgments by managers about who they’d rather hang out with.” Rivera spent nine months interviewing 120 corporate recruiters for her book on the subject, *Pedigree: How Elite Students Get Elite Jobs* (2015). She found that “for these gatekeepers, fit was not about a match with organizational values. It was about personal fit,” where managers “reported wanting to hire people with whom they enjoyed hanging out and could foresee developing close relationships with.” Such lifestyle- and personality-based definitions of fit can quickly lead to discrimination.

Some of this might be ugly, overt racism on the part of the interviewer or hiring decision-maker. But such reprehensible attitudes are not the only forces that perpetuate hiring discrimination. Sociologist Eduardo Bonilla-Silva (2006) points instead to unconscious bias — what he calls “racism without racists” — as a more important factor. The technical term for this is **implicit bias**: one of many unconscious preferences that we might hold, making snap judgments about people on the basis not only of race, but of gender, age, disability, and all sorts of other qualities, when we are confronted with their name, appearance, accent, or self-presentation. The “implicit” part
suggests that everyone holds implicit biases of one sort or another — you can’t help but absorb and internalize such messages when you grow up in a culture that constantly circulates biased images, messages, stereotypes and stories. As Yale University social psychologist Jennifer Richeson puts it, “This is not the product of some deep-seated, evil heart that is cultivated. It comes from the environment, the air all around us.” And as William Kristoff (2006) reminds us, you may even hold a negative implicit bias about a category to which you yourself belong (in fact, you probably do, if you were raised in the culture with everybody else).

Harvard’s Project Implicit has a free online implicit bias test

But there is hope. Researchers find that once we investigate and recognize these implicit biases — bringing them out of the background and subjecting them to conscious scrutiny — we can indeed learn to mitigate them and perhaps even overcome them (Kristoff 2016). As Professor Richeson puts it, “The only way to change bias is to change culture. You have to change what is acceptable in society. People today complain about politically correct culture, but what that does is provide a check on people’s outward attitude, which in turn influences how we think about ourselves internally.” (Wan & Kaplan 2017) So here’s the challenge: Explore your own implicit biases with a free online test available from the Harvard University “Project Implicit” at https://implicit.harvard.edu/implicit/
We all have work to do — especially those of us in higher education. As we saw in chapter 2, the data are clear: unemployment rates are lower, and lifetime earnings are higher, for students holding a four-year college degree. But even in the twenty-first century, is a college degree accessible for students regardless of cultural or economic background? “About 30,000 students from poor families score in the top 10 percent on the SAT or ACT college entrance exams and yet don’t go to selective schools,” reports the *New York Times*, “And nearly a quarter of low-income students who score in the top 25 percent on standardized tests never go to any college” (Rosenberg 2016). The *Chronicle for Higher Education* adds, “While 44 percent of whites and 59 percent of Asian-Americans ages 25 to 64 have a higher-education credential, only 28 percent of blacks, 20 percent of Hispanics, and 23 percent of Native Americans do. And 82 percent of students in the top third of the income distribution go to college, versus 54 percent in the bottom third” (Hill 2016).

Even students who are encouraged and able to attend college may face disparities along their career journeys related to income and wealth. As we saw in chapter 5, extracurricular work experiences like internships are increasingly important, not just for gaining real-world job experience and for building a professional network of mentors and contacts, but also for helping a student decide among different career paths. Yet too many students from backgrounds of modest means are unable to pursue internships because of economic constraints, especially some of the most high-profile, unpaid internship experiences that require students to live in expensive urban areas. For example, the *New York Times* notes that “More than 200 federal programs within Washington offer internship positions, some paid, some not. Congressional offices, which hire thousands of interns each year, pay very few of them. And the White House does not pay a single intern out of almost 100.” The latest data from the Collegiate Employment Research Institute at Michigan State University (2017) shows that only 68% of employers pay all of their interns, with unpaid internships more likely to be found in “arts and entertainment (36%), educational services (59%), government (37%), healthcare and social services (44%), information services (20%), and nonprofits (50%).” One analyst from the Brookings Institution, Joanna Venator, coined the term *glass floor* for such unpaid internships, arguing that they thwart the very idea of class mobility that college is meant to address (Shepherd 2016).

**Creating community and nurturing creativity**

The reasons for these disparities may be complex, but the call to action is not. The increasing complexity of our global economy and society, not to mention our sense of basic fairness and equity, make it clear that we must do better. Here at UW-Madison, we can all help to address these persistent disparities.
UW-Madison’s recent “Forward Together” report (2014) called out three reasons that diversity is crucially important to nurture on our campus:

1. The **educational rationale** based on empirical evidence suggesting a strong correlation between diverse student populations and the development of critical thinking skills and global/cultural competence.

2. The **leadership rationale** holds that valuing and integrating all voices produces better solutions to challenging and complex problems. Current and future leaders develop the necessary skills through collaborating with others with diverse experiences, identities, and ways of thinking.

3. The **social justice rationale** which recognizes that the need to increase higher educational opportunity for groups historically underrepresented in, or excluded from, colleges and universities is not only ethical and moral, but also necessary for broadening societal returns on higher educational investment.

In support of these three important diversity goals, we have committed to teach and train our students to be **culturally competent** in a world where people from many different backgrounds, standpoints, and beliefs must interact effectively to accomplish anything of value. The UW-Madison Division of Student Life puts it this way (2016):

Cultural competency is important for our graduates. Wisconsin is an incredible state and we are proud of its traditions. We want to produce graduates who can work with anyone, no matter where they are in the world. Therefore, having a workforce with a high level of cultural competency is critical to the success of the state and campus. Cultural competency increases the ability of our students to think critically to solve problems. It also enables our students to work better in teams and successfully with people of different identities.

We have a particular general education milestone that is meant to address this need for cultural competency: the **Ethnic Studies Requirement (ESR)**. The learning goals of these courses include the following:

- **Awareness of History’s Impact on the Present**: “how certain histories have been valued and devalued, and how these differences have promulgated disparities in contemporary American society.”

- **Ability to Recognize and Question Assumptions**: This means critical thinking skills, “teaching students to harbor a healthy skepticism towards
knowledge claims, whether in the form of media, political, or popular representations, primarily as these relate to race and ethnicity.”

- **A Consciousness of Self and Other:** This is important because “Awareness of self is inextricably linked with awareness of and empathy towards the perspectives of others.”

- **Effective Participation in a Multicultural Society:** “The ESR should ultimately engender in students the ability to participate in a multicultural society more effectively, respectfully, and meaningfully. This participation may be as mundane as being able to discuss race with a colleague or friend, or to recognize inequities in interpersonal, institutional, or other contexts.”

Employers value the cultural competency that you learn and practice through the Ethnic Studies Requirement -- and through the kinds of high-impact practices discussed in chapter 5 which take you “out of your comfort zone” and allow you to develop experiences and confidence in dealing with individuals and communities that are different from those you are most familiar with. Remember to talk about these accomplishments in your career narrative -- they are important and valuable!

For more on the UW-Madison’s efforts, and to get involved yourself, please visit our **Creating Community** web site at [https://diversity.wisc.edu](https://diversity.wisc.edu) — promoting equity, diversity and inclusion here on campus.

None of the concerns raised in this chapter are meant to dissuade you from pursuing the major, career, or life that you choose. But it is important to remember that none of us navigate a world where our choices are free from the frictions of history and culture. There is ample room for optimism. Social science has demonstrated that when people recognize their individual implicit biases, they can overcome them. And history has demonstrated that when enough people recognize their society’s structural inequalities, they can work to change them. The creative benefits that come from including the talents and voices of all of our constituent communities make it crucial that we never give up this important work.
1. What does it mean to be “culturally competent” and why is that a quality that employers value?

2. What does the term “SES” stand for and how does it relate to workplace equity?

3. What are some examples of “occupational segregation” and how are people trying to address these?

4. What does it mean to hold a view of “gender essentialism”?

5. What is the “gender similarities hypothesis”?

6. What is “implicit bias” and how is it measured?

7. Why might unpaid internship opportunities work as a “glass floor” for some students?

8. What resources exist at UW-Madison for understanding and supporting a diverse campus community?


"Think of your career as a game."

In 1955, the Parker Brothers company debuted a new family board game meant to capture the postwar optimism and energy of the baby boom generation, for whom the “space age” seemed to offer limitless opportunity. Called simply Careers, players competed around a traditional game board, rolling the dice and landing on squares where things would happen to move them closer to or further from victory. As one might predict from a game developed in 1950s America, Careers suffered from sex and gender stereotypes that appear ridiculous and offensive today (and the 1970s-era spin-off, Careers for Girls, didn’t do much to redress this wrong). But even with its cultural biases, Careers actually proposed something quite radical: There wasn’t simply one route to winning the game; instead, each player secretly selected their own “success formula” at the start, pursuing their individual goals of “money, fame, and happiness” through such endeavors both traditional (farming, “going to sea”) and futuristic (uranium prospecting, space travel).
The three-part self-actualization goals of this humble children’s game — balancing wealth and fame with the more intangible category of happiness — were the invention of game author James Cooke Brown (1921-2000). Holder of a Ph.D. from the University of Minnesota in “sociology, mathematical statistics, and philosophy,” Brown went on to author science fiction stories, to campaign for civil rights, and to invent an ambitious computer data representation language called Loglan.

Brown was a liberal arts and sciences graduate if ever there was one — not only reveling in the breadth of study in a way that led him both to literature and social activism, but also burrowing into a depth of disciplinary knowledge that led to the survival of his “Loglan Institute” to this day. And in his humble Careers game — reprinted and reissued for decades, even after his death — that ideal of a limitless set of careers, tied not to any one major and delivering a lifetime of rewards not easily reducible to starting salary — it is a college education which enables one to win the game.
Fast-forward from 1955 to 2015. Sixty years later, we’re still developing games about the career process, and we’re still imbuing them with our hopes and dreams about what a career can mean, along with our anxieties about how difficult it is to build a successful career in an environment of constant economic, technological, and cultural change. Instead of playing Careers, today’s youth might pick up a copy of Funemployed. Based on the same idea as popular party games like Apples to Apples, Funemployed casts one player in the role of an employer and the rest of the players as interview candidates for a job. Of course the jobs themselves are so varied as to verge on the ridiculous — you might interview as a Secret Agent in one round, and as a Butcher in the next. But what makes the game a challenging exercise in improvisation and performance is the fact that each interviewee must brag about three randomly-selected traits — anything from “Jazz Hands” to “Cold Black Heart.” In other words, unlike in Careers, where the goal is to simulate a successful life lived well, the goal of Funemployed is, well, to just have fun with a situation that everyone understands as stressful, random, and inevitably up to the capricious decision of someone else.
Interestingly, this career game for the 21st century also came from the imagination of someone educated in the liberal arts and sciences tradition: Anthony Costa, who received his Bachelor’s degree in Mathematics and a Master’s degree in Economics from the State University of New York, Binghamton. Self-published on the crowdsourced-funding site Kickstarter, Funemployed was the first entry in his new start-up company, Urban Island Games. And his LinkedIn site tells a story of a career which involved student tutoring in math, English, and social sciences.

The point of these examples is not only to suggest that the career of “game designer” can be an interesting and lucrative result of a liberal arts and sciences education (although remember that the digital and physical gaming industry now brings in more revenue than the cinema ticket office each year). Rather, we can use the example of popular games to see well that each generation — each historical and cultural moment — creates and promotes and wrestles with its own ideas of what a good “career” should mean. So it’s not surprising that you should need to wrestle with this idea as well.

Your career game

In this guide we’ve tried to work through the “rules” of the current career game, and to suggest some of the ways that the experiences you are having at a public research university and in a liberal arts and sciences curriculum will help you succeed in that game. For example, we’ve discussed:
• Why the **professional labor market** is changing, and how a college education helps you enter it — especially a **T-shaped liberal education**;

• Why **critical reflection** — understanding what you’ve experienced, in what ways you excel, and what you’ve accomplished — is a useful academic and career skill;

• Why your **Wisconsin Experience** is valuable, not only through courses and majors, but also extracurricular research, service, cultural, and work experiences;

• How **professional networks** are both connected to and distinct from your other social networks, but always involve listening, reciprocity, and trust;

• How to **communicate your interest and value** to an outside organization through written, online, and face-to-face techniques; and

• How to **access guidance** about your academic progress, career preparation, and job search from UW-Madison peers, professors, advisers, and alumni.

The key to all of these new rules is that your career game will differ from that of your parents, or of the generation that preceded you into the workplace. For example, back in 1978, when a curious student might have consulted the counterculture-sounding *Whole Earth Textbook* for career advice, they would have read the alarming news that “Many students finish college with no real plans, and the first job they get tends to determine the direction of their entire working career, a period that may exceed 40 years” (Pivar 1978). But today’s latest research shows clearly that your career game will be more than any single job. In a study published in 2001 but spanning the previous 25 years, scholars who followed a cohort of 170 people found that nearly two thirds of them experienced an unanticipated change in their careers (Pryor et al. 2011). (What’s more, more stable career patterns were actually associated with lower levels of career satisfaction.)

More recent statistics show that careers are still changing. The Bureau of Labor Statistics reported in 2004 that one in four workers in the US had been with their current employer for less than a year (Savickas 2012). In 2007, “the Association of American Colleges and Universities reported that Americans change jobs an average of 10 times after the age of 18 years” (Grier-Reed et al. 2010). And more recently, “The Bureau of Labor Statistics reports that young adults born in the early 1980s held, on average, six different jobs between the ages of 18 and 26, and by their 27th birthday only 14 percent of college graduates had a job that lasted at least two years” (Selingo 2016).

Many of today’s jobs are increasingly tied to short-term, flexible, and project-based teams of experts who address a key business or social problem and then
move on to a new configuration. Many of today’s organizations are increasingly structured in similarly shifting cooperative and competitive alignments with their peers, rather than building larger and larger bureaucratic structures themselves.

Some call this the **Hollywood model** of employment: “A project is identified; a team is assembled; it works together for precisely as long as is needed to complete the task; then the team disbands. This short-term, project-based business structure is an alternative to the corporate model, in which capital is spent up front to build a business, which then hires workers for long-term, open-ended jobs that can last for years, even a lifetime. [...] The Hollywood model is now used to build bridges, design apps or start restaurants” (Davidson 2015). Rather than an entertainment label, the founder of LinkedIn, Reid Hoffman (2014), uses a military metaphor for this kind of work, calling it a **tour of duty**: “the tour of duty represents an ethical commitment by employer and employee to a specific mission. We see this approach as a way to incorporate some of the advantages from both lifetime employment and free agency. Like lifetime employment, the tour of duty allows employers and employees to build trust and mutual investment; like free agency, it preserves the flexibility that both employers and employees need to adapt to a rapidly changing world.” For example, Hoffman notes that “Google’s People Operations (HR) department hires recent college graduates into a structured, twenty-seven-month [...] tour that allows them to try out three different roles in three, nine-month rotations.”

The most extreme version of this is the **contingent** or **temporary economy**, made up of the kind of individual, short-term, relatively low-paid jobs which used to be coordinated by temporary employment agencies but which today might be mediated by companies like Uber and their mobile internet apps, in what is being called the **gig economy** (Irwin 2016). This is more than just individuals switching organizations every few years, or staying with one organization but switching projects every few months; in the gig economy, workers are largely on their own, legally treated as **independent contractors** without the standard benefits of a salaried employee. According to the New York Times, “the number of Americans using these alternate work arrangements rose 9.4 million from 2005 to 2015” — now representing nearly 16% of the labor force (Irwin 2016).

Employers and entrepreneurs — especially in the new media technology and content industries — will inevitably portray such new social relations of work as positive for both the worker and the organization: “flexible” arrangements which allow for more “nimble” global competition, and thus more profit in less time. The good news is that a recent study by economist Henry E. Siu found that “increased mobility in one’s 20s leads to higher earnings later in life” for those who can afford to be **occupationally footloose** for a formative period while they acquire skills and experience (Selingo 2016). But while metaphors like “footloose,” “Hollywood” and “tour of duty” cast such a
work life as fun, glamorous and heroic, we must remember that such arrangements can also be more uncertain, unstable, and unreliable — and thus can be unsatisfying if they don’t deliver the promised skill and reputation boost which one needs to find the next paid project.

Whether understood in a positive or negative light, the footloose employee is becoming more and more prevalent. And the knowledge and experience that one needs to bring to any kind of task in any kind of workplace is growing seemingly faster than ever before — not just knowledge about new technologies or new markets, but knowledge about unfamiliar cultures, unexpected crises, untested policy proposals, and unanticipated scientific findings. Thus many scholars of vocational studies argue that “career should now be understood as lifelong progression in learning and work” (Collin et al. 2000). This is an experience that will differentiate your generation, the millennials, from all of the recent generations that have come before — and as of 2015, your generation now makes up the largest share of the US workforce (Fry 2015).

![US labor force by generation (millions)](chart)

What does this mean for your generation’s shared experience of the world of work? In an article titled “Career patterns for the 21st century,” Peggy Simonsen (2002) offered a typology of careers that young workers might pursue in this new environment:

- **Portfolio careers.** In this kind of career, a person acts as a sort of independent contractor, developing a skill set that can be marketed to many
different organizations as one builds their reputation over time. Simonson uses the example of a freelance writer: “Not employed by a single organization, a freelance writer might have regular assignments with one publication, occasional articles published by others, and some consulting work creating PR campaigns or brochures.” While such a career pattern might offer freedom and autonomy, it can also hold the risks of what is called “contingent labor”: “employment by a company as long as necessary, but not full-time, permanent employment [...] with no chance for advancement and typically no company-paid benefits.”

- **Lifestyle-driven careers.** In this career pattern, considerations outside of the workplace, whether rooted in hobbies and recreation, volunteer service to the community, or caregiving for children and elders, channel one’s career pursuits into part-time waged work. While this kind of career can be framed as a choice for pursuing “happiness” over “money and fame,” at the same time we must remember that caregiving is still highly gendered in modern American society, and often the result not of choice but of necessity: “Women balancing family and work have been the primary practitioners of lifestyle-driven careers.”

- **Linear careers.** A traditional career path from the 1950s in a for-profit or non-profit organization might have been a linear career — starting with an organization soon after college and then moving up a bureaucratic hierarchy into increasing positions of responsibility, often managing others. But today, though there are still such careers available, “linear careers in the twenty-first century are not likely to be with only one organization. Rather than going to work for a good company and expecting to be employed for life, employees will avoid much of the frustration experienced upon reaching a level in the organization beyond which they cannot move. Individuals who expect to move up in responsibility and compensation in the future will change organizations when they reach a plateau or growth slows.” Thus building social networks and learning new skills continues to be important even in a linear career.

- **Expert careers.** Traditionally this might have been a type of linear career referred to as a “dual-ladder” career: instead of growing steadily in responsibility for managing other people, one would grow steadily in some sort of scientific or technical expertise which was crucial to the organization. Simonson argued that “If an expert career pattern is right for you, it will require continuously developing your expertise.” And “Like a linear career, an expert career probably will not happen in just one organization.”

- **Sequential careers.** In this pattern, someone leaves a first career entirely and starts a second one — moving from corporate marketing into public education, for example, or moving from academic research into government administration. This can even happen at what used to be an “early retirement age” as people live longer while still engaging with the world of work. “Sometimes they move to completely different areas for the sake of
new experience, which typically requires starting in a lower-paying job than
the one they left,” writes Simonsen. “To avoid stepping back, sequential
career builders often move to a related area where their background is
valued, though not a direct contribution to the new field.”

• **Entrepreneurial careers.** Finally, there is the career path of
  shepherding an idea into a product, service, or organization of its own. But
  this does not necessarily mean Kickstarting your own board-games startup
  firm by yourself; Simonsen writes that “Increasingly, larger organizations
  are recognizing the value of entrepreneurial traits to innovation and creative
  problem solving inside the company. Gifford Pinchot (1985) calls this
  ‘intrapreneuring’: the company provides the equivalent of venture capital,
  and a small group of employees creates a business plan for an innovative
  product or service to be developed in-house and brought to market.”

Typologies of different kinds of careers like this can be useful in thinking
about what kind of work you’re searching for and preparing for, especially
during such an intense period of career exploration and education as college.
But remember that these typologies are only crude summaries; your career
will likely move in surprising ways as you build different experiences, choose
to prioritize different strengths and interests, expand your own social
networks, and encounter different opportunities tied to the changing global
context of culture, technology, and imagination over your lifetime.

**Playing the long game**

As we’ve tried to emphasize all through this course, your career won’t be
equivalent to your first job out of college — and in fact, your liberal arts and
sciences education isn’t meant to simply train you for your first job out of
college, but for a lifetime of shifting employment and entrepreneurship. But
it can be frustrating making your first moves in this game. Education
journalist Jeffrey Selingo (2016) reported recently that “In the 1980s, college
graduates achieved financial independence, defined as reaching the median
wage, by the time they turned 26, according to Georgetown University’s
Center on Education and the Workforce. In 2014, they didn’t hit that mark
until their 30th birthday.” Some scholars, like psychologist Jeffrey Arnett,
have even coined a new term to describe this phase in one’s life, generally
between age 18 and 25, when college and/or one’s first career experiences
generally occur: **emerging adulthood,** or “a time of life when many
different directions remain possible, when little about the future has been
decided for certain, when the scope of independent exploration of life’s
possibilities is greater for most people than it will be at any other period of the
life course” (Selingo 2016).

Recall that the mid-century vocational theorists like Donald E. Super talked
about developmental careers that unfold in phases, with each phase drawing
out different aspects of your talents, and demanding different kinds of responsibilities and learning. Contemporary business consultants are still using this idea. In his recent book *The Career Playbook*, business consultant James Citrin (2015) suggested that there were six phases to the typical professional career. The first three phases were “Aspiration” (one’s first few entry-level jobs), “Promise” (involving one’s first internal promotion or career switch), and “Momentum” (where one’s experience means that they begin to be recruited by other competing organizations).

Citrin argued that workers should pursue different reflective and networking strategies in each phase. In the “Aspiration” phase, meant to be “about discovery and introspection, the process of learning, and the development of knowledge,” he claimed “the most important objective is to discover your strengths and interests and to begin learning marketable skills. Try out as many different kinds of tasks and jobs as possible. Get feedback from professors, peers, and mentors who can help you to identify what you are good at-and what you’re not good at.” His advice was to focus on “writing,
thinking critically, listening well, solving problems, and collaborating effectively with others” — precisely the skills of a liberal education.

James Citrin’s idealized and balanced career triangle

Interestingly Citrin combined these career phases with a diagram he called the career triangle to indicate that one’s gratifications from work would likely shift over time, across the axes of salary, intrinsic job satisfaction, and “the lifestyle that your job allows you to lead.” He argued “The good news is that you can achieve high marks in all three areas; the bad news is that you can't necessarily have them all now, in the early stages of your career” (Citrin 2015). For Citrin, the career triangle was his own version of the secret formula a player writes down for winning the Careers game — though in this case, instead of trying to win the game with a static formula for success, the key is to recognize that your definition of success will evolve over time, just as your own career skills and choices will.

Planning for happenstance

The metaphor of a career as a game can suggest these kinds of systems, diagrams and rules — clear instructions for how the game is played, what is allowed and what is not. But the metaphor of a game also suggests rolling the dice or drawing a card: there’s always an element of uncertainty, randomness, or chance. And in fact, survey and case study research on how people actually build their careers indicates that “between 60% and 100% of adolescents and
adults report chance events that significantly influenced their career paths” (Pryor et al. 2011).

In response to this reality, vocational theorists and career counselors have recently developed a new concept to capture this phenomenon: planned happenstance. Even the term itself was meant to sound contradictory; as one scholar put it, people pursuing a planned happenstance strategy in their careers “must plan to generate and be receptive to chance opportunities,” privileging curiosity, exploration, open-mindedness, persistence, and flexibility in their career reflection and preparation. “Everyone’s career is affected by events that could not have been predicted,” write Mitchell et al. (1999), so in building our careers we should “acknowledge the pervasive role of unplanned events, take advantage of these events, and actively take action to create these events.”

But as these authors caution, planning for happenstance doesn’t mean magical thinking or complete reliance on fate: “There is a crucial difference between someone who passively relies on luck to solve problems and someone who is actively searching while remaining open to new and unexpected opportunities” (Mitchell et al. 1999). Another vocational scholar, Wayne Cascio (2010), calls this becoming an informed opportunist: one who excels at “combining accurate information with a flexible, opportunistic approach to his or her career.” Doing this requires a special skill: a willingness to accept the inevitable compromise and uncertainty of a life-long career-building process, rather than inflexibly pursuing one single, perfect outcome to one’s career game. Psychologists refer to this skill as ambiguity tolerance. Recently two researchers surveyed 275 undergraduates to assess how their ambiguity tolerance related to their career searches. They found that “Individuals who are tolerant with the inevitable ambiguity in the career decision making process are less likely to have distorted career beliefs and get stuck in [...] the rigid and compulsive pursuit of an optimal choice” at the expense of moving their career forward in unexpected but useful ways whenever the opportunity arises (Xu et al. 2014).

How does one do this in practice? Part of the challenge is asking yourself the right questions when you are reflecting on your college pursuits and your career aspirations. For example, Mitchell et al. (1999) suggest that rather asking “What is my major?” — which implies a single, definitive answer — students should ask “What questions would I like my education to answer?” — which opens one up to multiple paths to a single goal. Similarly, rather than asking “What career should I pursue?” and hoping to hit upon the one right answer, perhaps a better question would be “What strengths do I want to use in making an impact on the world around me?” which suggests a game board of many different career paths leading to the same prize in different ways.

Thinking about your career path in terms of planned happenstance can be scary, though; it can seem to take away your own agency — your own responsibility and credit — for your success. Interestingly, though, according
to Cornell economist Robert Frank (2016), many of us suffer from a sort of hindsight bias that actually attributes our success more to our individual hard work, and less to the good fortune of the circumstances and opportunities provided to us by the hard work of others, than might be warranted: “a growing body of evidence suggests that seeing ourselves as self-made—rather than as talented, hardworking, and lucky—leads us to be less generous and public-spirited. It may even make the lucky less likely to support the conditions (such as high-quality public infrastructure and education) that made their own success possible.” So as one side effect of building a career narrative that acknowledges the role of planned happenstance, we might better appreciate the shared, societal structures—like public research universities—that helped bring that positive happenstance (or luck) into our lives. As Frank notes, “when people are prompted to reflect on their good fortune, they become much more willing to contribute to the common good.”

“Do what you love”

In his book *The House of the Dead*, Fyodor Dostoyevsky wrote “If one wanted to crush and destroy a man entirely, to mete out to him the most terrible punishment ... all one would have to do would be to make him do work that was completely and utterly devoid of usefulness and meaning” (Krznaric 2012). Today that sentiment is still with us. You have probably heard the catch phrase “Do what you love, and the money will follow,” taken from the title of a 1987 best-selling New Age self-help book by Marsha Sinetar (McGee 2005). A 2015 survey of adults ages 18 to 34 by the global business consulting firm Deloitte found that 77% of these millennial respondents reported that a “sense of purpose” was the main reason they chose to work for their current employer (Putman 2015).

Given the fact that career-related work will likely represent over half of your adult waking life, it makes sense to seek out a career that appeals not only to extrinsic motivations (like good pay, safe working conditions, and a measure of job security), but also to intrinsic motivations (with ample opportunities for advancement, achievement, and recognition, through work that is interesting, creative, and fulfilling) (Wrzesniewski 2003). For example, in their 2001 book *Good Work*, cognitive psychologist Howard Gardner and his colleagues found that those who felt they were engaged in “work of expert quality that benefits the broader society” exhibited higher satisfaction with their work than others. They called this simply good work: “work that is both excellent in quality and socially responsible”.

But as we saw with the century-old vocational theories that tried to simply match the measured traits of different persons with the assumed traits of different occupations, one person’s motivation may actually be another person’s drudgery. More recent research shows that different workers have
abundant agency (individual power of choice and action) for interpreting the same kinds of work in different ways: “even in the same job done in the same organization, there are significant differences in how people make meaning of their work” (Wrzesniewski 2003).

As a starting point, consider the three-part typology that Bellah et al. (1985) developed to better explore the meanings that workers make of their careers. In their research, as explained by Wrzesniewski (2003), people classified their work in one of three ways:

- **Work as a job.** This orientation focuses on the extrinsic, material benefits of work, as a means to an end for basic survival and leisure time. “The work is simply a means to a financial end that allows people to enjoy their time away from work.”

- **Work as a career.** This orientation privileges not just the material rewards of salary, but also the responsibility and prestige that come along with salary. “For those with Careers, the increased pay, prestige, and status that come with promotion and advancement are a dominant focus in their work.”

- **Work as a calling.** In this orientation, neither financial nor prestige rewards are primary — instead, the intrinsic fulfillment of doing the work is what is most important. “In Callings, the work is an end in itself, and is usually associated with the belief that the work contributes to the greater good and makes the world a better place.”

The point of this framework is not to crudely classify every particular job into one of these three categories, but to demonstrate that any particular job might be understood by some of its workers more as a job, and by others more as a calling. In fact, Cheney et al. (2010) argue that “a sense of both individual and social satisfaction” are necessary for something to be a “calling”: “If you work only to fulfill personal goals, whether to get rich or to indulge in whim, it’s not your calling. If, on the other hand, you altruistically sacrifice your own interests to take care of those in dire need but get no sense of personal satisfaction from doing so, that’s not your calling either. The key, then, is to find the intersection of the two perspectives.”

Of course, the material, political, and economic aspects of different kinds of work still matter here; we can and should continue to push for safer working environments, democratic participation in decision-making, and fairer wages, without imagining that people should just change their attitudes about dangerous, disempowering, or exploitative jobs. But at the same time we must recognize that pride and value can and should be found in all kinds of work — and part of a critical reflection process in building a career is getting to know what kinds of work bring you just those positive senses of identity and accomplishment. As Todd Putman, management consultant and author of the 2015 book *Be More*, put it, “It takes a lot of self-reflection and a clear
understanding of what matters to you most to tease out your own definition of meaningful work.” Psychologist Angela Duckworth, author of the 2015 book Grit: The Power of Passion and Perseverance, offers similar advice to “foster your passion” rather than “follow your passion”: “Don’t panic if you can’t think of a career path that’s a perfect fit. In large part, this is because interests are not just discovered, they’re developed.”

Fortunately, deciding whether a particular job might lead to your ultimate calling is not something you have to figure out at the start of your career game; in fact, the research shows that is likely that your outlook on how you find meaning from work will change as your career grows. For example, in one study of how younger and older workers differ in their career attitudes, researchers who asked, “To whom or what do you feel responsible in your work?” Gardner (2007) found that “as individuals age, their sense of responsibility seems to grow.” In particular, “the youngest subjects express responsibility to those immediately around them; the oldest subjects (at least in the select population with which we were working) consider themselves responsible for the health of a profession or even the broader society” (Barendsen et al. 2010). A recent research study reported in the MIT Sloan Management Review (Bailey & Madden 2016) found similar results: “People did not just talk about themselves when they talked about meaningful work; they talked about the impact or relevance their work had for other individuals, groups, or the wider environment.” Importantly, such awareness and appreciation of the power of work did not equate in a simplistic way to “happiness,” but to a more poignant awareness: “People often found their work to be full of meaning at moments associated with mixed, uncomfortable, or even painful thoughts and feelings, not just a sense of unalloyed joy and happiness.” (Remember when we talked about understanding the “human condition” as part of your liberal arts and sciences education in chapter 2?)

If this kind of meaningful career is what you seek, you’re in luck. As we have seen from the broad statistics on college labor market outcomes, being UW-Madison graduates, you will already be well-positioned to find challenging, rewarding, and poignant work that builds on both the breadth and depth of your college education, no matter how the world of work continues to change in the future. After all, according to Money magazine, there’s a reason that UW-Madison “ranks in the top 10 when it comes to producing chief executive officers for the country’s biggest firms” (Novak 2016).

Our most recent data on post-graduation plans of College of Letters and Science graduates demonstrates that your liberal arts and sciences education continues to provide a great foundation for a successful career. According to Associate Dean Rebekah Paré, director of the L&S SuccessWorks center, “The placement rate for our students is about 90 percent within the first year – on a par with the School of Business and the College of Engineering.” And employers have noticed: “The number of employers here recruiting this year doubled from last year” (Schneider 2016).
The motto of the L&S SuccessWorks center is that, when it comes to your career journey, “we launch our students higher, sooner.” We hope you have found value in launching your own career journey through this student guide. Your career game is just beginning — enjoy the challenge!
1. What is the “Hollywood model” of employment, and how does it differ from the so-called “gig economy”?  

2. How does a “portfolio career” differ from a “linear career”? What are some positives and negatives of each of these career paths?  

3. What period of life is represented by the term “emerging adulthood” and how is that period of maturity unique?  

4. What is the “career triangle”? Which aspects of this triangle do you think will matter most to you as you begin your career?  

5. What does “planned happenstance” mean and how can one possibly “plan” for “happenstance”?  

6. What does it mean to think of a career as a “calling” rather than simply a “job”? Is this meaning the same for everyone?  

7. What is the placement rate (percentage going on to employment or graduate school) of UW-Madison L&S graduates after the first year?


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