

P R E F A C E

MY FAMILY IMMIGRATED to the United States in 1960 from a hardscrabble farming village in the Canadian Maritimes. We settled in the south side of Waltham, Massachusetts, just two blocks from the old Waltham Watch factory, in a melting pot neighborhood of diverse ethnic backgrounds and multifamily homes. My father worked in construction as a mason, my mother in a factory as a stitcher making car tops. They often picked up extra income cleaning offices and homes. I remember learning English and how to read in the study of a beautiful home in Weston, Boston's wealthiest suburb, sitting in a window seat with the sounds of vacuuming and my mother's soft singing as backdrop. My parents had eighth-grade educations, which was common then in rural Canada, and no one in our large extended family had ever attended college. College was reserved for children who lived in homes like the ones my mother cleaned. An unthinkable option for people like us.

My mother vividly remembered the conversation that changed everything, both for her and me. Mark Schlafman was my sixth-grade teacher at Ezra C. Fitch Elementary School. I remember Mr. Schlafman because he was good friends with my idol, Celtics player and legend John Havlicek, and because he later became an NBA referee. What my mother recalled about Mr. Schlafman was the parent-teacher meeting in which he said to her, “You know, Paul could go to college.” This idea seems hardly profound today, but it was the very first time that option, however remote and still years away, had been raised. It was the conversation that lifted us from poverty of aspiration.

Fast forward more than forty years and skip ahead a generation to my daughters, Emma and Hannah. Their parents are college graduates and professionals. Children of an English professor turned college president, they grew up on college campuses. College was not a distant possibility—it was an immediate reality. And the question was *where* they’d attend, not *if*. Both attended highly selective undergraduate programs. Emma recently finished her doctor of philosophy at the University of Oxford and is off to Yale Law School. Hannah completed her doctorate at Stanford University and is in a post-doc at Cal Tech. With a lot of hard work, some smarts, a fair bit of privilege, and a little luck, they have and should continue to have rewarding and meaningful work and lives. Their grandmother remained immensely proud (probably to the chagrin of her retirement home neighbors, regaled with stories of her granddaughters) until she passed away at age ninety-six, even as she could scarcely imagine the lives led by the granddaughters who adored her.

How does one trace the line from my parents’ humble backgrounds to my daughters’ walking the hallowed halls of Oxford and Stanford? The source of this social mobility, the bridge between the starkly different experiences of my parents and my children, was my education. The mentoring of wonderful public-school teachers like Mr. Schlafman led me to Massachusetts state colleges, first Westfield State University (then College) and then Framingham State University (also a college at the time). I was able to mostly pay for my college costs by working construction in the summers and having a work-study job during the school year, graduating

with almost no debt. My wife Pat, also the first in her family to go to college, attended Westfield and left with no debt. With the guidance of wonderful faculty members and opportunities to learn and lead, I came of age in those residential colleges. Then I headed off to graduate school and a career as a college and university president while Pat went to law school and a career as an attorney. That journey has made everything possible for our daughters. In many ways it's the classic American story of immigration, opportunity, and economic and social mobility. And the key was access to affordable education.

Things have changed. Low- and middle-income families have less access to affordable education and struggle with the rapidly increasing amount of student debt they now assume. The rising cost of higher education since the early '80s makes the health-care system look frugal and efficient by comparison. With rare exceptions, nobody can pay for a four-year residential college experience by working summer jobs and doing work-study the way I once did. Federal Pell Grants, designed to serve the neediest of students, cover less of the overall cost of attendance and have become a gateway to higher and higher levels of student borrowing, with more than \$1.7 trillion in total outstanding student loans now in the US.

What does that money buy? This is a hotly debated question, and the answer, as is often the case with complex questions, is, "It depends." For most students, obtaining a better-paying job and more fulfilling career is the number one goal of college attendance. In a 2013 report for the Brookings Institution, Stephanie Owen and Isabel Sawhill point out that the wage premium for holding a bachelor's degree *on average* is \$570,000 over a lifetime, more than enough to justify the cost of an education.¹ However, for an individual, a lot depends on which degree they pursue. For example, a STEM degree (science, technology, engineering, or math) pays off more in the job market than a degree in education, psychology, or literature, at least in the early stages of one's career.² As commentator Matt Reed has pointed out, the recently updated College Scorecard shows that a graduate in nursing from his institution, Brookdale Community College, can expect a starting salary of \$68,079, while someone

graduating from nearby Princeton University with a degree in English can expect an average first salary of \$47,260.³ Of course, any cost-benefit analysis depends on one's ability to graduate (doing so on time and without "wasted" or unnecessary and costly college credits is even better). And only about 40 percent of college students manage that feat. Because a bachelor's degree is to many job sectors what a high school diploma was twenty years ago—merely a ticket to entry—it helps to go onto a graduate degree, which further amplifies the college wage premium and usually requires more borrowing and more debt.

All of those caveats aside, if getting a better job and making more money are the goals, then a college degree, chosen wisely, remains indispensable for most people. The wage premium for college degree holders widened in the '80s and '90s. And while that growth curve flattened over the last ten years, it still holds. Furthermore, unemployment for college degree holders was half that for those with just a high school degree during the Great Recession. Ten years later in the pandemic, that differential may be even sharper and more consequential, with non-degree holders not only more likely to be unemployed, but also more likely to contract the coronavirus and die. We know that 70 percent of all new jobs require at least a two-year degree or its equivalent. Macroeconomic factors also strongly argue for more, not less, education.⁴ These factors include increasingly well-educated workforces in Asia and Latin America, pervasive use of technology, the fluidity of labor markets, and the need to be a lifelong learner in a rapidly changing jobs landscape.

Serious issues further complicate questions about the value of a college degree from a national perspective.

- The professions with the greatest short-term job growth projections before the COVID-19 pandemic require no college: retail, fast food, trucking, and more. This will exacerbate the problem of *mal-employment*, a term that labor economist Paul Harrington coined to describe the phenomenon of college graduates taking jobs that do not require the skills they acquired in college. Getting the right first job after college is critical, as 50 percent of those who are mal-employed in their first

job will be so five years later, and 74 percent of that group will still be so ten years later.⁵

- We have not fully come to grips with the ways technology, automation, and artificial intelligence will replace human labor in higher-skill roles as well as lower-skill manufacturing. Martin Ford has written about this problem in *The Lights in the Tunnel*, as has Jaron Lanier in *Who Owns the Future?* Recent research suggests their predictions about the impact of technology on labor markets already are coming to fruition.⁶ One of the reasons we saw a “jobless recovery” from the Great Recession was that companies maintained high levels of productivity with far fewer workers due to automation and technology. The impact of artificial intelligence and automation will be profound and will likely displace millions of workers. Whether that paradigm shift in the workplace will produce an offsetting and sufficient wave of new jobs is uncertain at best.
- We have two skills-gap crises. Employers face enormous challenges to fill lower-level positions that still require basic skills in communications, math, and technology, along with co-cognitive, behavioral skills like working in teams and giving and taking instruction. We also have a high-level skills gap with STEM jobs going unfilled.

The world of work is becoming increasingly inequitable and precarious, producing a society starkly divided between the haves and have-nots, between winners and losers, and a hollowed-out middle class. And while a college degree may not guarantee that you’ll win, the lack of one will increasingly condemn you to a growing underclass of low- and stagnant-wage earners. The pandemic has made those inequities distressingly clear, as workers without college degrees are more likely to be people of color, in high-risk frontline positions or unemployed, and on the razor-sharp edge of abject poverty.

A growing body of research shows not only growing economic disparity in America, but also less economic and social mobility. Put most simply, people born into poverty in the US are more likely to live and die in poverty than any time in the last century and more. While most Americans do

not believe it, countries long thought to be calcified in class distinctions—Spain, Germany, Britain, and even France (!)—have more social mobility. As the Pew Charitable Trusts Economic Mobility Project has found, 62 percent of Americans raised in the top fifth of incomes stay in the two top fifths during their lifetimes, while 65 percent of Americans raised in the bottom fifth of incomes stay in the bottom two fifths.⁷ The project also showed that education remains an effective instrument of social mobility. A person born into the bottom fifth of incomes is three times more likely to rise to the top quintile if they possess a four-year degree.

The problem that looms large for our country is that getting that much needed degree, and the social mobility that comes with it, is becoming harder for those without means. Besides cost and debt, we know that

- College completion rates are much lower for first-generation college students (44 percent earn a credential within six years) than their peers whose parents have college degrees (60 percent).⁸
- After twenty-five years of effort, completion rates for the poorest quartile of students have hardly budged, even as they have increased for the other three quartiles (most dramatically, no surprise, for the wealthiest).
- Because public high school education is funded from local real estate taxes, poor kids go to poor schools and come to college less well prepared for college work. The US is one of only three Organisation for Economic Co-operation and Development (OECD) countries that spends less on poor children's education than that of other students.⁹
- Lower-income students often have less social capital than students whose parents have college degrees: less information, less encouragement, less guidance, less confidence, and, of course, less money.

Attending college but failing to graduate is often worse than not going at all, since the result is some not-very-useful credits, no degree, and often serious financial debt. Dropping out can plunge a family deeper into poverty than if a student had never attended at all.

Today, a hard-working immigrant family, say from the Dominican Republic or El Salvador, will not have the same opportunities for education

and social mobility for its children that I enjoyed when my family came to this country in 1960. Racism (I enjoyed the advantage of being white), limited employment opportunities, and a drop in the real earnings from the minimum wages those jobs often pay all further hinder social mobility. A 2017 study published in *Science* showed that only half of those born in 1984 are doing economically better than their parents.¹⁰ David Grusky, a Stanford sociologist and coauthor of the study says, “A big part of the American dream is that each generation will do better than the one that preceded it. That has been part of what’s supposed to make this country special and distinctive. When it’s just a coin flip, we’re not living up to that commitment. It’s a pretty fundamental part of what we say this country can deliver and we’re not.”

At the heart of the American myth is the notion that one’s future and identity are not defined by one’s social status at birth. In “The Land of Opportunity” a person can make of themselves what they wish. We have deep cultural attachment to Horatio Alger rags-to-riches stories, whether an Oprah Winfrey born into rural poverty, Howard Schultz growing up in the projects, or Sam Walton leaving the family farm in Oklahoma to create the world’s largest retail business. Sometimes those success stories include dropping out of college—as Bill Gates and Larry Ellison both did—but those are exceptions that prove the rule.

The great engine of social mobility in the American success story has been higher education. And the creation of the GI Bill in 1944 democratized college and fueled a period of unprecedented economic growth and prosperity, though not for Black Americans, it is important to note. Higher education expanded and offered an affordable option for almost anyone who wanted to enroll. Americans developed a bedrock belief in the power of college to unlock opportunity and to secure a higher standard of living. With education, the child of the factory worker could become the business owner whose child would become a lawyer or a doctor, and each generation would be better off than the one that came before.

That myth has been shattered. After decades of little to no real improvement in earnings and the shock of the Great Recession, many Americans are not at all certain that their children will do better than they

did. Confidence in higher education has declined significantly in the US since 2015, Gallup has found, more so than for any other domestic institution Gallup tracks.¹¹ And while employers generally are confident in higher education, they tend to think recent graduates are better prepared to succeed in entry-level positions than to advance in their jobs.¹² Employers also say colleges and universities need to make changes to ensure that graduates have the skills and knowledge needed for the workforce.

While we ask higher education to do many important things—conduct research and expand knowledge, create better citizens and enrich culture, and support economic growth—most families want three things from college:

- the right credential to unlock the door to a successful career (and success means some combination of good pay, meaningful work, and a stable future)
- for it to be affordable
- to make students feel as though they matter, providing a sense of belonging and that institutions genuinely care about them

When taken together, the first two items define the *value* of higher education for most people. The third item defines the industry’s relationship to the American public. Higher education is not doing nearly as well as it needs to on all three fronts, and some would argue that it is contributing to the nation’s discontent and widening inequities.

An influential trove of research from Harvard University’s Opportunity Insights captures just how successful—or not—colleges are at helping students reach higher wage brackets after graduation.¹³ These “mobility rates” aren’t pretty for many institutions, including those that have plenty of resources to do better. Many campuses in the City University of New York system have upward mobility rates that are three times higher than the average rates for the Ivy League and other highly selective private institutions as well as for flagship public universities. And despite the broad push for college access in recent decades, the research shows that low-income students on average are much more likely to be shut out of high-mobility colleges that can help them make it to the middle class.

This book is rooted in my own story, my unshakable belief that education remains the greatest force for social good that we have available to us, and my growing conviction that the American higher education system that worked so well for decades and became the envy of the world is failing today. It is my attempt to reimagine higher education for what some have called the Fourth Industrial Age, one in which most of us will have algorithmic coworkers; where digital and physical realities blend; where the speed of change continues to accelerate; where our ethical, political, and social systems struggle to keep up; and where we entertain unprecedented opportunities for both great good and great evil.

Higher education as an industry is in many ways ill-suited for this new reality. It is too slow, too rigidly hierarchal and territorial, too hesitant to adopt new technologies and ways of doing things, too inefficient, and too focused on itself. We need a higher education *ecosystem* through which people will move in and out over the course of their careers and lives. It would as easily accommodate a tenth-grade girl working on college math as a sixty-five-year-old formerly incarcerated man finishing a high school diploma. Degrees would remain important milestones, but learning could also be just-in-time and more dynamic. Rather than the fragmented and generally disconnected approach we have today, we need a coherent, interconnected system for learning that can provide just the right learning at just the right time in just the right way. Such an ecosystem would harness technology to accommodate more learning pathways, include more providers beyond colleges and universities, provide a greater range and granularity of credentials, and offer much more flexibility and individualization than is possible today. Such a system needs to rethink its use of time-based structures of learning, with all the inequities they carry for people who have too little time.

A 2020 report from the Brookings Institution describes the growing “middle class time squeeze,” which has been driven by an uneven distribution of time demands.¹⁴ “Time is the ultimate scarcity,” the researchers write. “Not only do Americans work longer hours than those in other advanced nations, but the gap in longevity between those with higher and lower incomes has widened in the U.S.” As solutions, the report calls

for better alignment of schedules for education and work as well as the creation of subsidized lifelong learning accounts people can use to pay for education when they need it. Central to this book's argument is the idea that an education system built on structures and measures of time is poorly equipped to assess actual student learning, too rigid and thus unresponsive to the fast-changing world in which we live, and increasingly inequitable for the growing portion of the American public for which time is neither abundant nor flexible.

Much of the change underway in higher education is painful. But this book is optimistic. We can innovate and rethink what we do to better serve society. Most importantly, I'm not worried about all college students. For plenty of fortunate students, those like my daughters, the system works well enough. I'm concerned about students of all ages from lower- and middle-socioeconomic classes who face an uncertain future. They need something different from higher education. Not lesser, but better suited for their lives. And growing inequity makes this imperative even more urgent. The discussion that follows may raise more questions than it answers. But my hope is that it can help institutions and stakeholders develop higher-quality, lower-cost educational pathways to keep the American Dream alive for this next generation of students, who are not much different and no less deserving than I was when higher education changed my life.