INTRODUCTION

The American system for preparing young people to lead productive and prosperous lives as adults is clearly badly broken . . . Building a better network of pathways to adulthood for our young is one of the paramount challenges of our time.

With these words, *Pathways to Prosperity: Meeting the Challenge of Preparing Young Americans for the 21st Century*, a 2011 report from the Harvard Graduate School of Education, sounded an alarm about the narrowing life prospects of millions of young Americans. The United States was failing to prepare young adults to succeed in the workplace or, ultimately, to support themselves and their families. The report’s writers, who included one of us (Schwartz), did not use phrases like “badly broken” and “paramount challenges” lightly. But amidst growing anxiety about the rising cost of a college education and doubts about the return on those investments (symbolized by all of the unemployed twenty-somethings living in their parents’ basements), the report struck a nerve. The interest the report generated surprised even its authors. Its call to action resonated: employers need to engage more actively with educators and create alternatives to the predominant road to the middle class, which for decades had been a four-year college degree. Establishing a broader set of pathways, beginning in high school and ending in a variety of postsecondary credentials with high value in the labor market, is crucial to enable the two-thirds of young adults without a four-year degree to get the skills, knowledge, and work experience they need in order to launch themselves into successful, well-paying careers.

Fortunately, the United States did not need to start from scratch. Surprising as it was to many readers, one of the report’s key observations was that other countries were doing much better in preparing youth for the world of
work. These countries—northern and central European nations especially—had comprehensive vocational education systems that were attractive to a large number and wide range of students. They offered teenagers multiple meaningful job experiences, provided substantial flexibility and choice, and resulted in smooth transitions into the labor market.

That vision provides the frame for the work chronicled in this book—the creation of a national network of states, metropolitan regions, and large cities focused on developing systems of career pathways that span grades 9–14 and equip young people with the foundation required to start careers in such high-growth fields as information technology and health care. We launched the Pathways to Prosperity Network in 2012 as a collaboration between our respective organizations, the Harvard Graduate School of Education (HGSE) and Jobs for the Future (JFF), a Boston-based national nonprofit that builds educational and economic opportunity for underserved populations in the United States. We are now five years into the work, far enough along to be able to celebrate the early successes of some of our Network members. At the same time, we have become even more aware of just how daunting the challenges are in attempting to design and implement career pathways systems that cross two long-standing American divides—the gap between secondary and postsecondary education as well as the gap between what education provides and employers say they need. Today the case for bridging those gaps is, if anything, stronger than it was in 2012.

In the run-up to and the aftermath of the 2016 presidential election, Americans heard endlessly about the people and places the economic recovery left behind. We heard about stagnant wages and disgruntled, disaffected adults who were out of work or underemployed. We heard story after story about regions of the United States with high numbers of non-college-educated workers who were struggling to stay afloat financially. And we heard about manufacturing jobs lost to the global marketplace. But we heard barely a word about education and nothing at all about the condition of young people who were at risk in the uneven economy. Yet youth, too, belong to the dispossessed. The recession had an inordinately heavy impact on our young people, especially young people of color, youth from low-
income backgrounds, and youth who either dropped out of high school or graduated but have no postsecondary education plans. The rising number of young people ages sixteen to twenty-four who were out of school and out of work did not attract attention. Nor did the college graduates with four-year degrees who couldn’t find decent jobs—an anomaly compared with recoveries in the past.

Although the economic prospects of young Americans were not a significant issue in the 2016 political campaign, their situation has been receiving increasing attention among national organizations concerned about education and workforce development, among state and local leaders, and among a growing group of employers. At a time when education has never been more important to economic success, these stakeholders are struck today by the same three conditions highlighted in the *Pathways* report: falling educational attainment and achievement compared to other nations, a “skills gap” for jobs that pay a middle-class wage, and a dramatic decline in the ability of adolescents and young adults to find work that pays a living wage.

Within the education community, the decades-old “college for all” mantra has been replaced with the goal for all students to leave high school “college and career ready.” This shift reflects an acknowledgment that all students could benefit from more exposure to the world of work before they arrive at adulthood, and that college should not be viewed as a destination but rather as a pathway leading to a set of career options. State and local leaders, and governors in particular, are speaking out about the economic importance of better tailoring education to the new high-skill economy. There is a growing realization among employers that in order to meet their talent needs, they will have to engage with the education community in a more serious way. This is especially true for the hard-to-fill middle-skill jobs that employers reference when they complain about the skills gap. This understanding is reflected in the initiatives of the US Chamber of Commerce Foundation focused on helping employers apply the principles of supply-chain management to the recruitment, training, and development of their most important resource, their people. It also can be seen in the corporate philanthropy of major firms—like JPMorgan Chase, IBM, and SAP—that invest in inno-
ative grant programs to help schools and communities do a better job of preparing young people for the new economy.

This book is an early report from the field of an ambitious multistate initiative to change the way young Americans are prepared for careers. The Pathways to Prosperity Network reflects a growing movement in the United States to elevate the status of career preparation in our high schools and colleges, and to challenge the old dichotomy between college and career. In the twentieth century, high schools were organized on the premise that only some students would be going to college while most would be heading directly into the labor market. In the twenty-first century, it is now clear that all young people will need some form of postsecondary education or training if they are going to have a shot at a career that will enable them to support a family. But it is also clear that all young people must leave high school with a much better understanding of the world of work and careers, and a plan for acquiring the skills and credentials to get started on a career. A college degree by itself is no longer a guaranteed ticket to the middle class.

Consequently, while our work is certainly designed to support strengthening and modernizing career and technical education (CTE), it is about more than that. Only about one in five US high school students is a CTE concentrator (meaning the student takes three CTE courses in a single field), but all students need exposure to the world of work.¹ When the authors were growing up, nearly all young people had access to work during their teenage years, in the summers and after school. In the first decade of this century, the proportion of sixteen- and seventeen-year-olds with work experience dropped from just under half to only about one-quarter. But young people from professional families were three times as likely to find work as those from families in poverty. Thus the same young people who might benefit most from a job are the least likely to have one. This tells us that unless high schools take some responsibility for working with employers and community-based organizations to provide internships or other kinds of work experience for the youth who most need it, these young people are likely to join the ranks of the 3 million sixteen- to twenty-four-year-olds
who are neither in school nor work and therefore likely to wind up at the back of the hiring queue.2

As you will see in the following chapter summaries, we devote much more attention to the role of work in teenagers’ lives than is typically the case in books about education. We do this for two reasons. The first is that, in contrast to other organizations focused on one or another form of career education, our goal is not simply to use work and career as an engagement or motivation strategy to get more young people to complete high school, worthy as that is. Our goal is to help young people launch successfully into the labor market with in-demand skills and credentials. This requires seeing them through to a postsecondary certificate or degree. Attaining a first job on a career path that has meaningful advancement potential is the metric that counts most for us, for this is our best hope for breaking the cycle of poverty and economic immobility that has trapped far too many young Americans.

The second reason we focus so much on work is because we believe that work is a critical element in helping young people develop a sense of purpose and a place in the world and the sense of agency to make an impact. Simply put, the Pathways to Prosperity Network is about equipping young people with the skills and experience to make a successful transition not only from school to career, but also from adolescence to young adulthood. Hence, we pay significant attention to youth development as a central element in our work.

At this writing, the Pathways Network includes eight states, Arizona, California, Delaware, Illinois, Indiana, Massachusetts, Tennessee, and Texas; three regions, metropolitan Madison (Wisconsin), central Ohio, and the Twin Cities; and two large cities, New York City and Philadelphia. The number of students participating is ever changing. But thousands of young people are learning and gaining work experience in the Network, ranging from rural youth working in highly mechanized agriculture in California’s Central Valley to suburban teens enjoying their school’s partnership with high-tech enterprises around Boston to urban youth in Oakland practicing to become EMTs.
In the chapters that follow, we attempt to give a realistic as well as forward-looking portrait of the career pathways movement. In that spirit, we want to be sure to credit the multiple important players in this space. The *Pathways* report profiled several well-established national education organizations with solid track records of providing quality career-related education to high school students—organizations like the National Academy Foundation (now NAF), Project Lead the Way, and the Southern Regional Education Board’s High Schools That Work. They continue their important work today, along with several other national education, policy, and business groups that have joined the effort more recently, including the Council of Chief State School Officers, Advance CTE, National Governors Association, and Business Roundtable. While we gratefully acknowledge their contributions and provide some details of their progress, we tell this story with an unabashed focus on the work we know best and from which we’ve learned the most—the Pathways to Prosperity Network.

Chapter 1 details the evidence that the system we’ve got for helping young people transition from school into the labor market with relevant skills and credentials in fact remains “badly broken” today. We provide updated data illustrating how the situation harms not only millions of individual young people, with and without high school diplomas, but also employers and the economy as a whole.

Chapter 2 focuses on the origins of the Pathways to Prosperity Network, whose central mission is to help member states and regions design and build career pathways systems. We show what we mean by *career pathways system*—one that enables young people to get started on a career path in a high-growth, high-demand occupational field while still in high school; seamlessly connect to a postsecondary certificate or degree program in that same field; and exit with the skills, credentials, and work experience necessary to launch into the labor market, while leaving open the option to continue their education later if they want to earn a further degree. This chapter outlines the framework, core principles, and evidence base the JFF Pathways team brings to its work with each member, and highlights the three key building blocks that undergird the Network’s design.
Chapter 3 illustrates what our work actually looks like on the ground, using vignettes from some of our most developed member states and regions. We provide more detail about how states begin their Pathways work, and how our efforts build upon, but are not limited to, what has traditionally been thought of as vocational education or, more recently, CTE.

Chapter 4 probes more deeply into a core rationale for the Pathways project noted earlier: the importance of introducing work into the lives of young people, particularly for those from low-income families. We look first at the relationship between youth unemployment, economic mobility, and inequality. The chapter then reviews the developmental gains to be had for all young people from activities that take them into the world of work. Apprentice-like experiences help youth gain agency and join multigenerational professional networks. Finally, we make the case that skills and a credential are needed not only for success, but also social capital. Work experiences can help low-income youth develop the networks and connections they need to make good use of their credentials.

Chapter 5 builds on the previous chapter’s case for early work experience and describes the Pathways Network’s approach to providing early information, awareness, and exposure to the world of work and careers, culminating in an internship or other form of extended work-based learning. Although our main focus in the network is on grades 9–14, in this chapter we argue for beginning at least as early as the middle grades to introduce a systematic, grade-by-grade approach to the world of careers in order to ensure that all students graduate high school “career ready,” not just “college ready.”

Chapter 6 focuses on two implementation levers that we see as interconnected and mutually reinforcing: the engagement of employers and the development of intermediary organizations. If there is a single factor that most differentiates the international high performers in this field from the United States, it is the role that employers play. In countries like Switzerland, Germany, and Austria, employers are active partners with educators and government officials in shaping the system. Intermediary organizations, sitting between education institutions and employers, make important
contributions in mobilizing employer resources to help schools strengthen career preparation.

State policies supporting pathways are also critical to implementation—enabling, yet not ensuring, success. Chapter 7 addresses the evolution of policies that encourage and support the integration and alignment of high school and college learning, as well as work-based learning experiences. While US education leaders long have talked about a seamless K–16 system, the disconnect across high school and college persists, with far too many obstacles in the way of students’ smooth transition between the systems.

In chapter 8, the conclusion, we reflect on the state of the growing career pathways movement and ask a fundamental question: Are we and our colleagues building a career pathways field as well as a movement? We discuss the common vision movement members hold, but also look ahead to what work we need to do together to build a field with shared identity, shared standards, and deeper grassroots support. Finally, we look ahead at the major challenges facing our Network, and likely other networks as well, in the next five years. We conclude with optimism, but also with the knowledge that this work requires persistence and is not for the faint of heart.

Our work, as you’ll see in the chapters ahead, has been significantly influenced by what we have seen and learned in other countries with much better developed systems to help the majority of young people make a successful transition from the world of schooling to the world of work. While being fully mindful of all of the reasons why it is impossible to simply transplant successful education programs from one political and cultural context to another, we remain convinced that there are lessons from higher performing vocational systems that can be adapted and applied to the US setting. The Swiss vocational system, in particular, represents for us an “existence proof” that it is possible to design a system that simultaneously meets the developmental needs of young people, provides a wide range of employers with a steady stream of highly skilled young professionals, and enables the nation’s economy to remain a world leader.

The fact that the Pathways to Prosperity Network and other national organizations are now paying increased attention to the skills gap is a reflec-
tion of growing public concern about whether our education system is designed to meet the needs of a quickly transforming economy. The emerging career pathways movement is a response to that concern, and as such, is attracting support from corporate and philanthropic leaders and from policy makers and elected officials across the political spectrum. In a highly polarized national political environment, a strategy that holds out the promise of being able to better meet the needs of young people and of our rapidly changing economy could become one of the few public policy initiatives with the potential to gain broad bipartisan support.